ANNUAL PUBLIC HEALTH REPORT

OF THE

PROVINCE OF BIHAR

FOR THE YEAR

1937

AND THE

ANNUAL VACCINATION REPORT

FOR THE YEAR

1937-38

BY

Lt Col. S. L. MITRA, D.P.H., I.M.S.,
Director of Public Health, Bihar.

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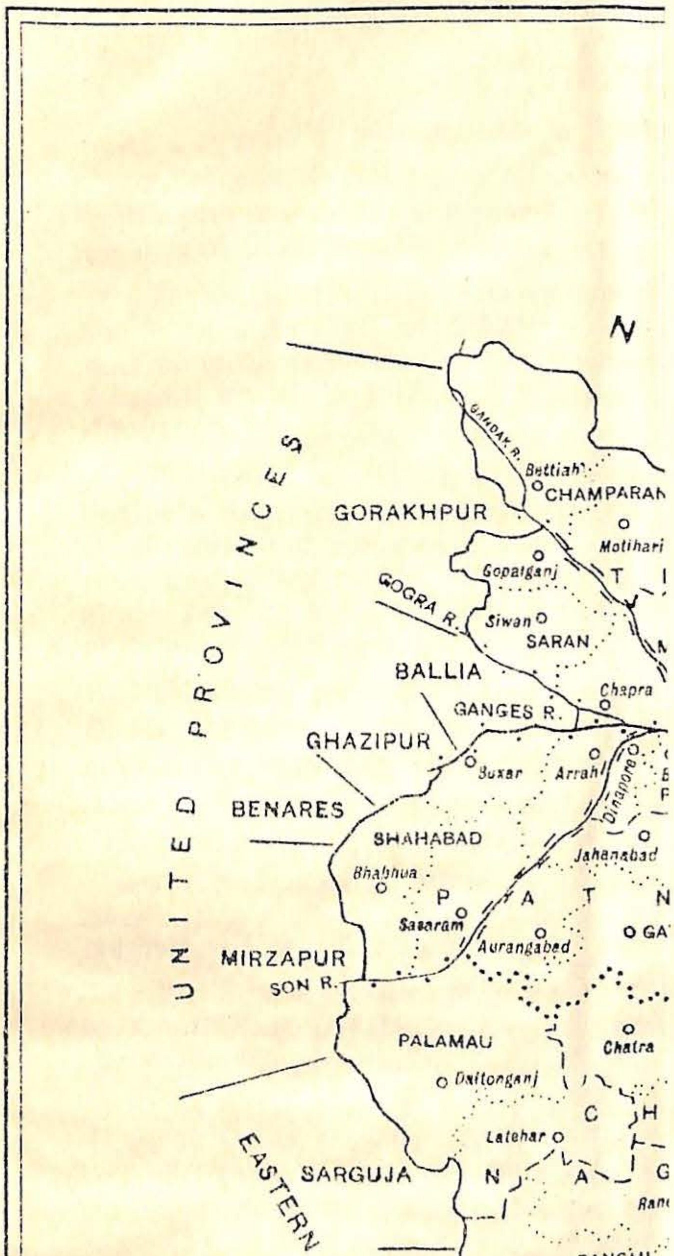
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ANNUAL PUBLIC HEALTH REPORT

OF THE

Province of Bihar for the year 1937.

CHAPTER I.

METEOROLOGY, PRICES OF GRAINS, ETC.

1. Rainfall.—The following short account of the meteorological conditions in the province during the year 1937, is taken from the report of the Director-General of Observatories :—

The total rainfall in January was nil in Bihar and Chota Nagpur against the normal rainfall of 0·52″ and 0·75″ in these areas respectively. The maximum temperature was above normal in Bihar and below normal in Chota Nagpur, whilst the minimum temperature and humidity were below normal throughout the province.

The total rainfall in February was in excess by 1·98″ in Bihar and 2·20″ in Chota Nagpur. There were fairly widespread rainfall in Chota Nagpur on the 20th and 21st and in Bihar on the 21st and 22nd of the month. Mean maximum temperature was below normal and minimum temperature was above normal and the relative humidity was in excess over the whole province.

The total rainfall in March was in defect by 0·51″ in Bihar and 0·83″ in Chota Nagpur. Both maximum and minimum temperatures were below normal and humidity was in defect throughout the province.

The total rainfall in April was in excess by 0·57″ in Bihar and 0·21″ in Chota Nagpur. The maximum temperature was below normal in Chota Nagpur and above normal in Bihar. Minimum temperature was below normal throughout the province. Relative humidity was in excess in Chota Nagpur and in defect in Bihar.

The total rainfall in May was in large excess in Bihar and in slight defect in Chota Nagpur. Maximum and minimum temperatures were below normal throughout the province. Relative humidity was in defect in Bihar.

The total rainfall in June was in great defect in Bihar and in slight defect in Chota Nagpur. Maximum temperature was above normal throughout the province while the minimum temperature was above normal in Bihar and below normal in Chota Nagpur. The mean relative humidity was in excess in Chota Nagpur and in defect in Bihar.

The total rainfall in July was in defect by 4·02″ in Bihar and in excess by 1·71″ in Chota Nagpur. Maximum temperature was above normal throughout the province and the minimum temperature was above normal in Bihar and below normal in Chota Nagpur. Mean relative humidity was in excess in Chota Nagpur and in defect in Bihar.

The total rainfall in August was in large excess by 7·17″ in Bihar and in defect in Chota Nagpur. As a result of heavy rains floods occurred in Bihar causing serious loss of life and property and many breaches in the railway lines. Maximum temperature was below normal and relative humidity was in excess throughout the province.

The total rainfall in September was in defect by 1·62″ in Bihar and in excess by 2·50″ in Chota Nagpur. Maximum temperature was below normal in Chota Nagpur and above normal in Bihar. Relative humidity was in excess in Chota Nagpur and in defect in Bihar. Skies were more clouded than usual in Bihar.

The total rainfall in October was in defect by 0·10″ in Bihar and by 0·19″ in Chota Nagpur. Mean maximum temperature was above normal in Bihar and below normal in Chota Nagpur and mean minimum temperature was below normal throughout the province. The mean relative humidity was in excess in Chota Nagpur and in defect in Bihar.

The total rainfall in November was in defect by 0·30″ in Bihar and 0·45″ in Chota Nagpur. Maximum temperature was above normal and minimum temperature below normal throughout the province. Relative humidity was in excess in Chota Nagpur and in defect in Bihar.

The total rainfall in December was in defect by 0·10″ in Bihar and by 0·19″ in Chota Nagpur. Maximum temperature was above normal in Bihar and below normal in Chota Nagpur. Minimum temperature was below normal while relative humidity was in defect throughout the province.

The total rainfall during the year in Bihar and Chota Nagpur was 55·82″ and 54·87″ respectively against 60·44″ and 62·21″ respectively in the previous year.

2. *Price of common grain.*—The average price of common rice during the year varied from an average of 10 seers 2 chittaks in the district of Muzaffarpur to 15½ seers in Santal Parganas. But in the majority of the districts it remained over 12 seers as in the previous year.

The following statement shows the average monthly price of common rice at the headquarters of the districts of the whole province for the year 1937.

Statement showing the monthly average price of common rice (cheapest) in the headquarters mar[k...] the districts of Bihar for the year 1937.

District.	January.	February	March.	April.	May.	June.	July.	August.	September.	October.	*November.
1	2	3	4	5	6	7	8	9	10	11	12
	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.
Patna ...	12 8	12 8	12 8	13 0	13 0	12 12	12 4	12 0	13 2	13 12	14 4
Gaya ...	13 4	13 0	13 4	12 0	12 0	12 0	12 0	12 8	12 8	12 8	12 0
Shahabad ...	12 0	10 14	11 0	11 4	11 6	11 2	10 8	11 4	11 8	15 0	15 0
Saran ...	11 0	11 8	11 8	11 0	11 0	12 0	12 0	11 0	11 8	12 0	13 12
Champaran ...	12 4	11 4	11 0	11 0	11 0	11 0	10 0	10 0	10 8	10 8	12 8
Muzaffarpur ...	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	11 0
Darbhanga ...	11 8	11 6	11 12	11 8	11 12	10 12	10 12	10 14	11 0	11 0	11 4
Monghyr ...	11 12	11 12	11 8	11 8	11 0	11 0	11 0	10 12	11 0	11 8	12 0
Bhagalpur ...	13 4	12 8	12 8	12 8	11 0	12 0	11 4	11 2	12 4	12 4	13 0
Purnea ...	11 8	11 0	10 0	10 0	12 0	12 0	12 0	11 8	11 0	10 0	12 0
Santal Parganas	15 0	14 8	14 0	15 0	14 12	15 0	13 12	14 0	16 0	16 8	18 8
Hazaribagh ...	14 0	13 12	14 0	13 0	13 0	12 2	13 4	13 0	14 8	14 8	16 0
Ranchi ...	15 12	14 8	15 2	14 2	14 6	14 10	13 12	14 4	15 0	16 8	17 0
Palamau ...	13 8	12 12	13 0	12 0	12 8	13 2	12 14	12 0	13 4	15 0	16 0
Manbhum ...	15 0	14 0	14 0	14 0	15 0	16 0	14 0	14 0	15 0	19 8 (new)	18 0
Singhbhum ...	15 0	15 0	15 0	14 8	14 0	13 12	13 4	14 8	15 12	17 8	17 12

*Price prevalent on 15th December 1937.

CHAPTER II.

Vital Statistics.

1. The population of the province at the census taken in February 1931 was 32,371,434. This figure has been used to calculate the various ratios in the report.

The mid-year population as ascertained by the natural increase method, i.e., by addition of excess of births over deaths from the 1st July 1936 to 30th June 1937, was 34,684,228 as against 34,293,254 of the previous year. The figure for emigration and immigration is not correctly obtained nor is the method for recording births and deaths free from defect. Every year a large number of labourers emigrate from this province to Bengal and Assam, but their exact number is not definitely available. This figure as stated here cannot, therefore, be regarded as quite accurate.

2. The estimated population for the year under review was 34,372,890 as against 34,039,314 of the previous year. This figure has been calculated on the assumption that the population has increased by arithmetical progression. The following two statements record the estimated population in various age groups and also the ratios of births and deaths from the chief diseases calculated on the estimated population of 1937.

Statement A.

Population according to age group of the province of Bihar.

	1		2		3		4		5	
	Under 1 year.		One and under 5 years.		5 and under 10 years.		10 and under 15 years.		15 and under 20 years.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1921 ...	428,171	430,762	1,242,286	1,359,885	2,379,710	2,288,361	1,839,157	1,512,999	1,218,397	1,124,128
1931 ...	389,473	396,266	1,996,260	2,110,112	2,330,522	2,129,096	2,005,728	1,767,032	1,322,530	1,361,558
ial increase ...crease, 1937.	—38,695	—34,496	+753,974	—750,227	—49,185	—159,265	+166,571	+254,033	+1,041,133	+237,430
increase or ...ase, 1937.	—15,475	—13,800	+452,383	+450,138	—19,676	—63,703	+99,942	+152,418	+156,178	+142,458

6		7		8		9		10	
and under 30 years.		30 and under 40 years.		40 and under 50 years.		50 and under 60 years.		60 years and upwards.	
le.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
8,042	2,509,809	2,119,934	2,208,112	1,473,372	1,458,625	818,288	851,054	655,716	876,508
3,352	2,894,276	2,347,958	2,314,501	1,595,753	1,595,753	904,766	913,225	594,542	727,186
5,310	+384,467	+222,024	+106,389	+122,381	+122,381	+86,478	+62,171	−61,174	—149,322
5,186	+230,682	+133,215	+63,834	+73,428	+73,428	+51,888	+37,302	—24,468	—60,428

STATEMENT B.

Ratios of births and deaths from chief diseases calculated on the estimated population of 1937.

	Male.	Female.	Total
Births	16·4	15·6	32·0
Total deaths	22·2	20·2	21·2
Cholera	0·4	0·4	0·4
Small-pox	0·2	0·2	0·2
Plague	0·03	0·05	0·04
Fevers	17·8	16·2	17·0
Dysentery and Diarrhoea ..	0·1	0·6	0·6
Respiratory disease	0·1	0·08	0·6

3. *Births.*—The total number of births in this province during 1937 was 1,100,657 (564,243 males and 536,414 females) as compared with 1,144,008 in 1936. This means a decrease of 43,351 births or 1·3 per thousand population during the year over those recorded in the preceding year. The provincial birth-rate for the year 1937 was 34·0 as compared with 35·3 in 1936. The average birth-rate from the least ten years was 33·7.

The statement below gives figures regarding birth-rates in other provinces of India.

Province.	*Birth-rate per mille of population, 1937.*
Bihar	34·00
Orissa	34·75
Bengal	34·20
United Provinces	35·92
Central Provinces	40·65
Punjab	46·49
Bombay	40·68
Madras	38·72
Burma	34·55
Assam	31·31
North-West Frontier Province	30·74
Sind	20·52

4. *Birth Registration.*--The higher birth-rate 46·3 was recorded in the Gaya district and the lowest birth-rate 27·1 in the district of Purnea. The municipalities of Tikari, Sassaram and Daudnagar registered the highest birth-rates, namely 44·8, 43·5 and 39·5 respectively whilst the municipalities of Jamshedpur, Deoghar and Dumka registered the lowest rates, viz. 3·5, 7·0 and 7·5.

The rural and urban areas of the province recorded 1,072,847 and 27,561 births, the mean birth-rates for these areas being 34·5 and 20·8 per mille population respectively.

The birth-rates recorded in the majority of the districts and towns came to very near the mean figures. The average does not appear to be appreciably affected because variations of both high and low rates have been few and confined only to small populations.

5. *Deaths.*—The total number of deaths in the province during the year under review was 729,454 (385,755 males and 343,699 famales) as compared with 701,814 in the previous year. Out of these 710,677 deaths were recorded in the rural areas and 18,575 in the urban areas. The total deaths show an increase of 27,640 deaths or 0·8 per mille of the total population over those recorded in the preceding year. The provincial death rate for 1937 was 22·5 as compared with 21·7 in 1936. The slight increase in the death-rate during the year under review has been essentially due to the occurrence of comparatively larger number of deaths from fevers and cholera. The average death rate for the last decinnium, however, shows a slight decline and was recorded to be 23·0 as against 23·3 of the previous year. The statement below shows comparative death-rates in the other provinces.

Province.	*Death rate per mille of population, 1937.*
Bihar	22·53
Orissa	28·63
Bengal	24·70
United Provinces	21·38
Central Provinces	32·63
Punjab	32·71
Bombay	27·50
Madras	23·99
Burma	24·75
Assam	22·21
North-West Frontier Province	21·27
Sind	12·49

6. *Death Registration.*—The highest death-rates were recorded in the districts of Palamau, Purnea and Bhagalpur as 29·2, 28·8 and 27·2 respectively whilst the lowest death-rates were recorded in Santal Parganas and Manbhum districts as 16·7 and 17·5 respectively. Amongst the towns in the province the highest death-rates were recorded in Gaya (36·4), Colgong (24·2) and Raghunathpur (23·6) and the lowest in Sahebganj (2·5), Dumraon (2·7) and Dumka (3·8).

The average death-rate of the rural areas was 22·9 and of the urban areas (24·0). Thus the rural death-rate was higher than that of the urban by 8·9.

The rate of increase in the population, i.e., the excess of the birth-rate over the death-rate in the province was 11·5 as compared with 13·6 in the previous year.

7. *Mortality according to age, class and sex.*—The mortality rate based on the census figures of 1931 was 180·2 for male infants and 144·6 for female infants under one year of age per mille population as compared with the corresponding figures of 192·2 and 152·6 of the previous year. But when calculated from the actual births recorded during 1937 the mortality rate for infants under one year was found to be 124·4 for males and 106·8 for females per mille with the total infant mortality rate of 115·9 per mille as against the corresponding total of 118·0 in 1936. This shows that the rate was reduced by 2·1 per mille during the year as compared with that of the previous year. With the termination of the first year of life the rate as usual fell to 39·5 for males and 34·4 for females as compared with the corresponding figures of 37·7 and 33·0 registered in the previous year. The mortality amongst males was higher than that amongst females in the ratio of 112 to 100.

There was, as usual, considerable differences in the death-rates amongst the different communities. The death-rate was highest amongst Hindus (23·1) and lowest amongst Budhist (7·6). A death-rate of 20·4 was recorded among the Muslims and 15·6 among the Christians while that of the other classes was 20·4.

8. *Verification of the registration of vital occurrences.*—Registration of vital occurrences is compulsory in all the municipal areas of the province. The accuracy of 20,263 vital occurrences was investigated and verified by the health officers and the vaccination inspecting staff during the year and out of these 137 omissions were detected. Prosecutions were instituted in 66 cases and of these 62 ended in convictions. The registration of vital occurrences is not compulsory in rural areas. The reporting agency in the rural areas as well as in the municipal areas remains to be the police. The machniery for reporting vital statistics in the rural areas continues to consist of the village chaukidars who attend their respective thanas on parade days to report the vital occurrences of their respective villages. The collection of vital statistics through the agency of the illiterate village staff although prevails in almost all over India remains defective, specially with regard to the classification of causes of deaths. The village chaukidars while reporting deaths have also to state cause of deaths based on the diagnosis made by themselves or that by any other lay villager or by some illiterate member of the family of the deceased.

With the appointment of health officers as Registrars of Births and Deaths in some of the bigger municipalities, namely Bhagalpur, Patna City, Ranchi and Patna Administration Committee, the responsibility of collection, tabulation and verification of vital occurrences has been transferred in recent years to the health staff of these local bodies. This measure has brought about a distinct improvement in the registration of vital statistics in these areas and with the appointment of better trained health personnel it should be possible for the other municipalities of the province to undertake this responsibility with efficiency. A partial transfer has also been effected in Gaya, Chapra and Muzaffarpur municipalities where both the municipality and the police report these statistics separately. The figures supplied by the police and those by the municipal health staff are compared and cases of under and over-reporting are verified. The results show that the figures collected by the staff of the municipalities are more accurate. It is expected that as more and more municipalities appoint their health officers, they will realise the importance of accuracy in statistical records and will do all in their power to effect improvement in the existing machinery with a view to assume full responsibility of this task independent of the police.

Verification of Vital Statistics in Rural Areas.—In rural areas 210,874 vital occurrences were verified by the vaccination staff as against 161,087 in 1936. In the rural parts of the country, specially in the districts where suitable health organisation under a district health officer is not maintained verification of vital statistics and their accurate registration become difficult, but in the districts where such officers are employed, they check the figures supplied by the vaccinators and the Civil Surgeons compare the police figures with those furnished by the health officers.

9. *Publication of Vital Statistics.*—The vital statistics for all municipal towns in the province with a population of over 20 thousand was as usual regularly published during the year. Weekly epidemic reports from all the districts showing attacks and deaths from cholera, small-pox, plague and influenza were published regularly in the *Bihar Gazette* and also in some of the important newspapers.

By the publication of these statistics the general public is kept informed of the actual state of health of the larger towns and of the prevalence of epidemic diseases in the districts. Publicity of this kind also demonstrates the utility of accurate vital statistics and helps to create an interest in the minds of the people for the actual state of public health.

CHAPTERS III AND IV.

STATE OF PUBLIC HEALTH IN THE PROVINCE AND HISTORY OF THE CHIEF DISEASES—EPIDEMIOLOGY.

1. *Comparative incidence of the chief diseases.*—The undermentioned statement compares the ratios under the chief heads of mortality in 1937 with the average ratio of the previous ten years :—

	Urban.		Rural.		Combined.	
——	Ten years' average.	1937.	Ten years' average.	1937.	Ten years' average.	1937.
1	2	3	4	5	6	7
Cholera	0·8	0·3	1·5	0·4	1·5	0·4
Small-pox	0·5	0·3	0 5	0·2	0·5	0·2
Plague	0·05	0·04	0·1	0·05	0·1	0.04
Fevers	6·8	6·6	17·3	18·5	16·9	18·1
Dysentery and Diarrhœa ..	0·5	0·8	0·1	0 09	0·1	0·1
Respiratory diseases ..	0·5	0·7	0·1	0·08	0·1	0·1
Injuries	0·5	0·5	0·3	0·3	0·3	0·3
All other causes ..	4·3	4·8	3·3	3·2	3·4	3·2
Total ..	14·1	14·0	23·4	22·9	23·0	22·5

The death rate has increased from 21·7 in 1936 to 22·5 per mille population in 1937. The increase in the number of deaths was due chiefly to comparatively larger number of deaths from cholera and fevers, the death rates from these two diseases being 0·4 and 18·1 as against 0·2 and 16·9 of the previous year. The highest death-rate 18·1 was recorded from fevers. Deaths from malaria are included under the heading of "Fevers" and as malaria prevailed in epidemic form in several districts of the province during the year under review, it is presumed that the increased death rate from fevers was chiefly due to greater number of deaths from this disease.

The urban areas, except a few small municipal towns, continued to record proportionately less number of deaths from cholera and fevers. This is obviously due to the maintenance of better standard of sanitation in the municipal towns, but the urban rates from the respiratory diseases again exceeded those recorded in the rural areas. The deaths from pulmonary tuberculosis, pnemonia and bronchitics following influenza are all reported under the heading "Respiratory diseases". Although no means exist to know the exact number of deaths from each of these diseases, it is presumed that a big proportion of these deaths was caused by pulmonary tuberculosis. The chief reason for higher death-rates from pulmonary tuberculosis in the urban areas of the province may be ascribed to overcrowding, mal-nutrition and lack of fresh air. Public opinion has been greatly roused in recent years against the scourge caused by this disease. Tuberculosis has been added to the list of notifiable diseases under the Municipal Amendment Act of 1935 and steps were taken during the year to resuscitate the provincial

anti-tuberculosis organisation under the auspices of the King George Thanksgiving Anti-tuberculosis Fund.

2. *Cholera Statistics.*—The death-rate from cholera increased from 0·2 per mille in 1936 to 0·4 per mille in 1937. The districts of Bhagalpur and Monghyr recorded the highest death-rate, viz., 1·2 and 1·0, respectively, whilst each of the districts of Patna, Gaya, Muzaffarpur and Santal Parganas registered a death-rate of 0·61 from this disease. Amongst the towns Hajipur (2·0), Colgong (1·9) and Revilganj (1·4) reported highest death-rates.

3. *Cholera in the Province.*—The total number of deaths from cholera in the province was 13,949 in 1937 as compared with 6,070 in 1936 and 57,136 in 1935. The districts of Bhagalpur and Monghyr registered highest number of deaths from this disease during the year, namely 2,676 and 2,293 deaths as against 492 and 27 of the previous year. Of the other districts, Muzaffarpur, Gaya, Santal Parganas and Patna reported, namely 1,871, 1,485, 1,235 and 1,045 respectively, comparatively larger number of deaths from cholera during the year. The disease started in sporadic form in all these districts from March and they remained infected till the end of the year. The maximum intensity was reached in all of them in November, except in the district of Muzaffarpur which registered highest number of deaths in June. A comparative study of deaths from cholera in the province from 1922 to 1937 demonstrates the following interesting epidemiological features :—

(*i*) The province is an endemic home of cholera. The disease tends to recur every year in epidemic form in one or the other part of the province in varying intensity.

(*ii*) The disease generally occurs late in the summer in the districts of South Bihar and remains present till the advent of the winter months, but it begins early in the summer months in the districts of North Bihar and dies out by the end of monsoon period. This is in all probablity due to certain co-relation that may exist between the outbreak of the disease and the prevailing climatic factors, i.e., rainfall, humidity and temperature.

(*iii*) The source of the first occurrence of the disease is sometimes easily traceable when infection is found to be imported from an infected area either from the neighbouring districts or the adjoining provinces but occasionally the sources get shrouded with a mystery, and one begins to consider the importance of carriers.

(*iv*) The bad year of cholera generally recurs after every five or six years and the highest intensity of the epidemics in the districts of South Bihar and in those of North Bihar occurs in two different but consecutive years. In the cycle of the epidemicity, the peak years have invariably corresponded with Kumbh mela years, but the intensity of the disease shows a definite lowering during the last decinnium. This is apparently due to better understanding among the masses of the real nature of the disease and timely demand and quicker provision of preventive measures.

4. *Cholera preventive measures.*—Although it is commonly realised that without protected water supplies and efficient conservancy it is difficult to arrange for an effective control of the spread of infection in village areas, a definite progress has been made in recent years in checking the outbreaks of cholera from taking an explosive turn specially in the districts which have employed well trained health personnel under qualified health officers. Ten districts continued to employ health officers with suitable subordinate health staff during the year and there were as usual fewer demands for epidemic doctors to control cholera from these districts. But when the outbreak became widespread and the district staff were found to be inadequate to cope with the situation, temporary epidemic doctors had to be detailed from the department. Nine Government epidemic doctors were detailed on epidemic duty during the year in the cholera affected areas.

Stock of disinfectants such as Bleaching Powder and Permanganate of Potash and also of Choleraphage are kept in reserve at the office of the district boards and the municipalities. In cases where the stock get exhausted and the local bodies are not in a position to replenish them, the Civil Surgeons and the executives of the Local Bodies send requisition for these to the Director of Public Health who supplies these to them. Anti-cholera inoculation has now become a popular preventive measure and people are pitching faith in increasing degree in its efficacy, with the result that a great many persons now come forward of their own accord to offer themselves for inoculation. Government maintain a large stock of cholera vaccine at the Vaccine Depot, Namkum. The Superintendent, Vaccine Depot, is generally asked by telegram to despatch the vaccine immediately it is required anywhere in the province. The number of doses of cholera vaccine issued during the year was 610,000 as against 288,930 doses during the previous year. The use of choleraphage for the prevention and treatment of cholera is dealt with in Chapter XIV.

5. *Small-pox.*—The total number of deaths from small-pox during 1937 was 7,485 as compared with 22,863 in 1936. The mortality rate for the year 1937 was 0·2 as against 0·7 of the last year. From a study of mortality rate from small-pox from 1922 to 1937 it appears that the lowest number of death from this disease was recorded in the province in 1922. The number of deaths then gradually increased every year till the maximum was reached in 1926. The figure then declined annually till the lowest was touched in 1929 with another gradual rise and a peak rise in 1933. From 1934 onwards, a gradual lowering in the yearly deaths from this disease was again experienced and 1937 has recorded the lowest number of deaths since the last peak rise. A cyclic rise appears to be well marked in the epidemicity of small-pox in the province. The exact cause of this cyclic rise is not definitely understood, but it is believed that the effect of vaccination wears out with the passage of time usually five to seven years; with the result that greatest accumulation of susceptible individuals occurs during the year that corresponds with the peak years. The highest death rate from small-pox was registered during the year in the districts of Palamau (1·0), Manbhum (0·5) and Gaya (0·4) while the districts of Ranchi, Muzaffarpur and Hazaribagh returned the lowest death-rate, namely 0·03, 0·003 and 0·05 respectively. Amongst the towns Bettiah, Patna City and Chatra reported highest death-rates, viz., 2·03, 1·9 and 1·7 respectively.

Primary vaccination is compulsory under the Bengal Vaccination Act in all the municipal towns of the province and the rural areas of the districts of Patna, Gaya, Bhagalpur, Saran, Champaran, Darbhanga, Purnea, Bhagalpur and Hazaribagh. The provision of the Act was also extended to the district of Shahabad during the year under review. All these districts except Hazaribagh maintain health organisations under district health officers. With the enforcement of the provisions made under sections 92 to 96 of the Local Self-Government Act, the responsibility of the administration of the Act has been transferred to such local bodies as have taken up the approved health organisation scheme and the health officers of the district boards of Gaya, Shahabad, Saran, Muzaffarpur, Purnea, Darbhanga, Patna, Champaran, Bhagalpur and Manbhum have been appointed Superintendents of Vaccination. The inspection of vaccination is done by the district health staff in these districts and Government vaccination inspecting staff have been withdrawn. The Civil Surgeons function as the Superintendents of Vaccination in places where the local bodies have no health officers and Government exercise control over the administration of vaccination through the Assistant Directors of Public Health who make annual inspection tours and submit special reports on this work. The three special inspectors of vaccination that were appointed by Government a few years ago to ensure better supervision of the vaccination work continued to function during the year, one under each of the Assistant Directors of Public Health. Their services were specially utilised to render assistance to the local bodies in the vaccination administration in accordance with the provisions of the Vaccination Act in the compulsory areas. They were also sent to most of the areas where small-pox broke out in epidemic form to induce the people to accept vaccination operations. A great deal still remains

to be done before it can be hoped to make vaccination universally acceptable. It is expected that all the district boards of the province will soon take over direct control of this very important public health measure and provide facilities for vaccination and re-vaccination of the entire population.

The vaccine lymph manufactured at the Vaccine Depot, Namkum is supplied throughout the province free of cost. The lymph before being issued is throughly tested with regard to its potency and purity. The lymph produced is considered to be of high standard. This is borne out by the high percentage of successes obtained with its use in primary vaccination which has invariably been found to be 98 to 99 per cent. 1,369,749 vaccination operations were performed in the province during the year under report. Out of these 990,780 were cases of primary and 378,969 were those of re-vaccination.

Although vaccination confers sure protection against small-pox infection and about two lakhs of persons get vaccinated every year, the province continues to register large number of deaths from this disease and the incidence tends to show sharp rises at times. This is due to the fact that a large number of the children born every year escape even primary vaccination and the need for re-vaccination is not yet fully appreciated by a large number of the general population. It is, therefore, considered that so long not only primary vaccination but also periodical re-vaccination of the whole population is not made compulsory, it will not be possible to ensure complete disappearance of the incidence of this disease.

6. *Plague.*—There were 1,470 deaths from plague in the province during the year as compared with 1,245 in the previous year. The death-rate remained the same as in the last year. Although incidence of plague has greatly declined during the last decade in the province there are still certain isolated foci in the district of Champaran, Saran, Muzaffarpur, Darbhanga and North Monghyr where plague starts almost every year with the approach of the winter season, reaches its maximum intensity during February and March and declines with the advent of the summer months. The district of Saran with a total of 1,098 deaths recorded the highest death-rate (0·4) followed by Muzaffarpur (0.09) and Champaran (0.02).

In the district of Champaran plague was responsible for 51 deaths during the year and of these 45 deaths occurred in Pettiah town. Infection of plague was imported to this town for the first time in January 1934 and the disease has become endemic since then. The disease prevailed in this town in epidemic form almost throughout the year, except in the months of August and October. Bettiah being an important grain centre of the district, offers a favourable field for a high rat population. Steps have been taken during the last four years to give extensive anti-plague inoculations to the residents of this town. A Government epidemic doctor was detailed on plague duty in Bettiah town and the district board staff carried out anti-plague measure in the areas under the police-stations of Bettiah and Sikarpur.

In the district of Saran the epidemic in January continued from the previous year. The disease subsided in May but broke out again in epidemic form by the third week of September. 105 villages were affected under four police-stations, namely, Gopalganj, Mirganj Siwan and Mairwan. Over and above the three assistant health officers the district board appointed two temporary epidemic doctors to do epidemic duty. A total of 1,098 deaths were recorded from plague in the district as against 1,884 of the previous year and 32,626 persons received anti-plague inoculations.

In Muzaffarpur district plague as usual was confined to the endemic areas of the Hajipur subdivision and a portion of the Sadar subdivision with a mortality rate of ·07 as against ·06 of the previous year. Mahua thana where a mortality rate of 0·8 was registered was most severely affected. Anti-plague inoculations 6,076 in number as against 3 780 of the previous year were performed by the dispensary and the public health doctors of the district board.

In Darbhanga 42 deaths were recorded during the year as against five deaths of the previous year. The deaths mostly occurred in sporadic form in the Sadar and Madhubani thanas.

The incidence of the disease appears to have disappeared in the district of Monghyr. No death occurred from plague in this district during this as well as in the previous year although an endemic focus had existed in Beguserai subdivision where deaths had been occurring every year prior to this period.

7. *Dysentery and Diarrhoea.*—There were 4,006 deaths from this group of disease as against 3,118 deaths in the preceding year and the mortality rate was 0·1 as against the same in the previous year. The towns which recorded highest death-rates were Purnea (2·2), Patna City (1·9) and Forbesganj (1·7). The highest number of deaths occur from these diseases usually during the monsoon months whilst the lowest is recorded during the driest part of the year. This fact demonstrates that the incidence of these diseases as well as of other bowel diseases are closely associated with the nature of conservancy service and the state of water-supply.

CHAPTER V.

Fairs and Festivals.

1. A large number of *melas* are held every year in the different parts of the province to which the attendance of the visitors usually exceeds fifty thousand. Besides these a great many smaller *melas* are also usually held on the eve of the religious festivals. Most of these *melas* have only local interest and are usually attended by the inhabitants of the districts in which they are held and those of the adjoining districts. But the three *melas*, namely, *Pitri-paksha* held at Gaya, *Harihar Chatra* at Sonepur and *Bhadra Purnima* at Deoghar have more than local interest and usually attract a very large number of visitors from the other provinces of India. Most of these *melas* had caused in the past extensive outbreaks of cholera epidemic in this province, but with the growth of public health organisations in the districts and provision of efficient conservancy arrangement with protected water-supply specially at the big congregations the dread of quick dissemination of the disease in *mela* areas has greatly been reduced in recent years.

2. The Sonepur Fair which is considered to be the largest cattle fair in the world was held during this year, from the 14th to the 28th November 1937. 276,322 persons visited this *mela* from the 13th to 23rd November and of them about two lakhs visited the *mela* area on the bathing day which fell on the 18th November 1937. 35,505 cattle, 3,802 horses, 540 elephants and 32 camels were brought for sale in the *mela* area. Special sanitary arrangements as in the previous years were made by the Public Health Department in conjunction with the health staff of the district board of Saran in whose jurisdiction the fair is annually held. Three medical officers were deputed by the Public Health Department for mela duty and the mela area was divided, as usual, into three sanitary circles. Each of these circles was placed in charge of a medical officer deputed by the Public Health Department who were assisted by the Health Inspectors and other subordinate staff detailed by the district board. Adequate arrangement for the supply of protected water existed throughout the mela period. About 30,000 gallons of potable water was made available every day through 269 taps in the mela areas. Besides these, steps were also taken to get all the 165 wells disinfected twice by the 7th November and from the 11th November they were treated with choleraphage every alternate day. Usually cholera epidemic subsides in this province before the Sonepur Fair starts, but this year cholera was present in most of the neighbouring districts whence a large influx of visitors are normally drawn during the mela period. This necessitated the adoption of extra precautionary measures. Epidemic doctors with outfits for anti-cholera inoculation were posted to important steamer ghats and the water-supply was also regularly treated with choleraphage at all the important railway stations from Chapra to Sonepur. 37 cases

of cholera occurred in the mela area. All of them were removed for treatment to the temporary cholera hospital and of them 9 died.

The health staff delivered a number of lectures on health and hygiene illustrated with magic lantern slides. Printed leaflets on public health subjects in different vernaculars were widely distributed as in the previous years and illustrated coloured posters were also pasted at prominent places. The Health Officer of the district board of Patna who was deputed to take a batch of volunteers for training in the construction of septic tank latrines to Ushagram in the district of Burdwan, put up two such latrines in the mela areas for demonstration proposes with a view to stimulate interest in the visitors for introducing these latrines in private residences. It was found that this type of latrine could be best adapted for places where sufficient water-supply for flushing of the seats was available and where the effluent could be safely discharged, without contaminating the water of the neighbouring wells. A census taken of the prostitutes camping in the mela area revealed the presence of 327 prostitutes as against 302 of the previous year. In the absence of legislation to abolish the brothels in the mela area, steps were taken to collect history of antecedent incidence of venereal disease amongst them and stress was laid in demonstration lectures on the importance of precautionary measures against such infection.

3. The Pitripaksha mela at Gaya commenced from the 26th September and lasted till the 5th October 1937. 70,875 pilgrims visited Gaya during the period as compared with 67,442 in the previous year. 245 lodging houses were licensed during the year as against 192 in the previous year, under the places of the Pilgrimage Act which is enforced in Gaya. Most of the pilgrims were accommodated in the lodging houses and Dharamshalas. Adequate sanitary arrangements were made in the mela areas by the Lodging House Committee assisted by the health staff of the Gaya Municipality. Piped water supply was made available for 18 hours a day from 4-30 A.M. to 10-30 P.M. throughout the mela period. Cholera cases were present in Gaya town before the mela commenced. The danger of the introduction of the infection among the pilgrims was fully realised and every effort was made to apply intensive precautionary measures. Although well water was rarely used for drinking purposes, all the wells in the lodging houses as well as those on the road sides within the mela area were regularly disinfected. There were 20 attacks and 8 deaths from cholera during the whole mela period. All these cases were removed to the cholera hospital for treatment and of these 10 attacks and 7 deaths occurred among the pilgrims. Immediate steps were taken to check the disease from spreading among the other visitors. 504 persons were inoculated against cholera in the mela areas, but inoculation was restricted only to those persons who offered themselves to get inoculated. Reliance was mainly placed on choleraphage which was extensively used both as a curative and prophylactic agent throughout the mela period. Choleraphage was also used in the treatment of the cases at the hospital supplemented by transfusion of saline only where necessary. Results were very encourging and the disease did not spread in epidemic form.

4. The Bhadra Purnima mela held at Deoghar was attended by 4,069 pilgrims. The Places of Pilgrimage Act is also enforced in Deoghar and licenses for 79 lodging houses with a capacity of accommodation for 3,154 pilgrims at a time was issued during the year. The town of Deoghar being considered as a sacred place of pilgrimage about 40,000 pilgrims occupied the lodging houses and the camping ground for varying periods during the year. A health officer for Deoghar municipality was appointed during the year who also looked after the sanitary arrangement of the mela area. There were 63 cases of cholera during the year and of them 42 occurred during the Bhadra Purnima mela. 17 of these cases proved fatal. All the cases except two recorded during the mela period occurred among the pilgrims and were traced to have been infected before their arrival in the mela area. Elaborate precautionary measures organised during the mela period prevented the spread of the disease in epidemic form in the town.

Besides these, a great many other fairs are also held in the province. In the districts where health organisations existed, adequate sanitary arrangements were made on these occasions by the local bodies under the direct supervision of the health officers. The important melas were also attended by the Assistant Director of Public Health who helped the local bodies in organising the sanitary arrangements. Government epidemic doctors were detailed by the Public Health Department to wherever their services were considered necessary.

CHAPTER VI.

Urban Sanitation.

Thirty-six out of 53 municipalities in the province were inspected by the Assistant Directors of Public Health during the year under review and reports on these inspections were duly submitted to Government. Stress was laid in all the reports on the need for provision of wholesome water supply, efficient removal and disposal of refuse and night-soil, suppression of nuisance, improved housing and better control of food supplies because it is realised that adequate provision of these, forms the basic requirements of a community, if it is to maintain at all a reasonable standard of health. The majority of the municipalities continue to show inability to employ suitable qualified health officers, on grounds of financial stringency, and so long as their financial position does not improve, any prospect for employment of such officers by them appears to remain a remote possibility. The municipalities of Patna, Gaya, Ranchi, Bhagalpur, Darbhanga and Muzaffarpur, continued to maintain full-time health officers during the year. The Health Officers of the Patna, Gaya and Ranchi Municipalities belong to the provincial public health cadre and are paid by Government while the one employed by the Bhagalpur municipality is paid by its own fund. The rules framed by Government laying conditions for recruitment of health officers by the municipalities were so amended during the year as to provide smaller municipalities having less than fifty thousand population with option to employ health officer with L. P. H. qualification. The amendment enabled the municipality of Deoghar to appoint a health officer during the year with this qualification on smaller pay. It is expected that the other smaller municipalities of the province will also take advantage of this provision and soon appoint such officers.

The health officer employed by the municipality of Darbhanga resigned during the year in order to accept appointment as a health officer under the district board of Manbhum and it is regretted that his place was not filled by another qualified health officer.

The necessity of appointment of suitable qualified health officers in the larger municipalities, such as Darbhanga, Muzaffarpur, Monghyr, Chapra, Arrah, Purulia, Hazaribagh, Jamalpur, Bihar and Siwan has long been felt and had been stressed for number of years in the public health report. The question of maintenance of qualified health officers under the local bodies is now considered so important from the view point of making satisfactory progress in the health administration that time is getting ripe when Government should be justified in acquiring powers if necessary by enactment of suitable legislation, to form sufficient public health services and require the local bodies concerned to maintain them at their own cost or if necessary with grants-in-aid from Government. The Assistant Directors of Public Health also continue to recommend in their successive reports the desirability of appointing health officers for the municipalities. Sanitary Inspectors by reason of their limited training are not considered qualified enough to carry out effective preventive measures during epidemics. This is also borne out by the fact that the municipalities which do not employ health officers make requisitions for Government epidemic doctors much more frequently than those who have health officers.

Compulsory primary vaccination under the Bengal Vaccination Act is enforced in all municipal towns of the province and the Civil Surgeons function as the Superintendents of Vaccination except in the municipalities of Patna, Gaya, Ranchi and Bhagalpur where the responsibility of control of vaccination has been transferred to the Health Officers and these health officers have been appointed as Superintendents of Vaccination under section 268 of the Bihar and Orissa Municipal Act, 1922.

Most of the recommendations made by the Assistant Directors of Public Health involving minor expenditure were as usual given effect to by the municipalities at their own cost but recommendations regarding the advisability of taking up bigger schemes and major public health projects for the provision of protected water-supply, improved drainage, construction of sanitary markets and opening up of congested areas, etc., could not be undertaken because of the stringency of finances with which the municipalities in general chronically suffer in the province.

2. Expenditure on sanitation in municipal towns :—

The statement below shows the receipts and expenditure for sanitary purposes during the year 1936-37 as compared with those of the previous year :—

Number of municipalities.	Total receipt including opening balance.		Heads of expenditure.	1935-36.	1936-37.	Percentage of expenditure to the total receipts.	
	1935-36.	1936-37.				1935-36.	1936-37.
1	2	3	4	5	6	7	8
53	66,67,359	63,43,637	Conservency ...	10,48,308	10,81,176	15·7	17·0
			Drainage ...	3,84,603	4,71,613	5·8	7·4
			Water-supply ...	4,72,235	4,62,989	7·1	7·3
			Vaccination ...	13,808	14,794	0·2	0·2
			Epidemics ...	17,131	19,417	0·2	0·3
			Markets and Fairs ...	32,279	40,753	0·5	0·6
			Other Sanitary Charges.	22,511	8,348	0·3	0·1
			Public Health staff ...	61,861	62,670	0·9	1·0
			Total ...	20,52,736	21,61,760	30·8	33·9
			* Contagious Hospitals	242,535	228,958		

* This represents cholera hospitals and leper asylums, etc. An expenditure of Rs. 2,28,958 has been incurred in 1936-37. The expenditure is mainly met from Government grants.

3. Chief sanitary works in municipal towns :—

The details of expenditure under this head are dealt with in the report of the Superintending Engineer, Public Health Circle, Bihar.

CHAPTER VII.

RURAL SANITATION.

1. The approved health organisation scheme functioned in ten out of the sixteen districts of the province, viz., Patna, Gaya, Shahabad, Muzaffarpur, Saran, Champaran, Darbhanga, Bhagalpur, Purnea and Manbhum during the year. The primary aim of the organisation is to prevent the occurrence

of the epidemic diseases and difuse knowledge of elementary hygiene and sanitation among the rural masses. A complete health organisation as was originally recommended by Government for adoption by the district board consisted of a fully qualified health officer with headquarters station at the district town, and Assistant Health Officer, preferably with L. P. H. qualification with headquarters at such subdivisional town and a trained health inspector with headquarters at each police station with a suitable number of such other staffs as sanitary jamadars, disinfectors, vaccinators and sweepers. Each of the districts where this organisation scheme has been introduced, maintains a qualified Health Officer but the subordinate health staff vary in accordance with the respective financial positions and the budget allotments of the different boards for expenditure, on health and sanitation. Some of these districts have also assistant health officers of L. M. P. qualification who are posted at the subdivisional headquarters whilst all the districts where the scheme functions have been divided into different circles, consisting mostly of two or three thanas. Each of these circles are put in charge of a trained health inspector. The Health Officers of the districts of Gaya, Muzaffarpur, Saran, Bhagalpur, Darbhanga, Champaran and Shahabad belong to the Public Health Cadre of the province and they draw their salaries from the provincial budget, while the Health Officers of the district boards of Patna, Purnea and Manbhum are the servants of the boards and draw their salaries from the boards' funds. Patna and Muzaffarpur district boards received an annual contribution of Rs. 10,000 from Government for their health organisation schemes while the Manbhum board receives an annual grant of Rs. 6,000 towards the cost of the maintenance of the health officer. Previously the civil surgeons were entirely responsible for the control of vaccination administration as Superintendents of Vaccination and Government employed inspecting staffs (Inspectors and Sub-inspectors) to check the work of the vaccinators. But as the health organisation scheme was introduced in some of the districts it became possible to transfer the responsibility of vaccination administration to the district boards. The Health Officers of these districts have been appointed Superintendents of Vaccination and the Government vaccination staffs have been withdrawn from such districts.

The Bengal Vaccination Act continued to remain enforced in the rural areas of the districts of Patna, Gaya, Muzaffarpur, Champaran, Saran, Darbhaga, Purnea, Bhagalpur and Hazaribagh. Application of the Act was also extended to the rural areas of the Shahabad district during the year under review. Vaccination is not compulsory in the rural areas of the remaining districts.

The problem of rural health deserves special consideration and when it is remembered that as much as 96 per cent of the total population of this province lives in rural areas, the need for such consideration still becomes more imperative. In villages such elementary requirements as safe water supply and satisfactory disposal of night soil remain mostly unprovided and by far the majority of the annual toll of deaths continues to occur from preventable diseases. It is natural, therefore, that organisation should deserve to occupy a very prominent place in the picture of any future rural development scheme for the province. A health organisation scheme with a qualified health officer is considered to be an urgent necessity, for every district. Without a Health Officer in the district, efficient supervision of the work of the subordinate health staff and effective control of epidemics can hardly be possible. The district boards which have not adopted the health organisation scheme, however, maintains at present a certain number of subordinate health staff which is increased temporarily during the time of epidemics. But whenever an epidemic assumes serious proportion and there is demand for bigger staff, their boards usually requisition for Government epidemic doctors. This means delay and the districts which have no health officers are naturally handicapped to organise timely adequate measures to combat epidemics.

2. Expenditure on sanitation by district boards :—

The following statement shows the receipt and expenditure of district boards under the principal headings of sanitation :—

Number of district boards.	Total receipt including opening balance.		Heads of expenditure.	1935-36.	1936-37.	Percentage of expenditure to the total receipts.	
	1935-36.	1936-37.				1935-36.	1936-37.
1	2	3	4	5	6	7	8
	Rs.	Rs.		Rs.	Rs.		
16	1,86,75,861	1,93,91,795	Conservancy ...	2,59,747	3,82,999	1·4	2·4
			Drainage ...	4,189	5,037	0·02	0·02
			Water-supply ...	1,39.484	1,73,760	0·7	0·9
			Vaccination ...	13,263	16,619	0·07	0·08
			Epidemics ...	92,618	83,800	0·5	0·4
			Markets and Fairs ...	21,553	21,328	0·1	0·1
			Total ...	5,30,954	6,83,543	2 8	3·5

Statement of expenditure on sanitation by district boards and per capita of population district by district.

District.	Income of financial year			Expenditure on general sanitation	Expenditure on drainage and water-supply.	Expenditure per capita including water-supply and drainage.	Expenditure per capital excluding water-supply and drainage.
	Income during 1936-37.	Balance in hand of the Preceding year.	Total.				
1	2	3	4	5	6	7	8
	Rs. a. p.			Rs. a. p.	Rs. a. p.		
Patna ...	10,48,213 0 0	2,91,542	13,39,755	45,684 0 0	14,488 0 0	0 0 7½	0 0 5⅛
Gaya ...	13,01,548 0 0	3,94,227	16,95,775	52,117 0 0	11.428 0 0	0 0 5⅛	0 0 4⅛
Shahabad ...	9,467 0 0	399	9,966	12,358 0 0	3,434 8 6	0 0 1⅜	0 0 1¼
Saran ...	8,58 310 0 0	1,07,586	9,65,896	26,005 0 0	9,462 0 0	0 0 2¾	0 0 2⅛
Champaran ...	10,77,731 10 0	...	10,77,731	15,000 0 6	16,171 2 0	0 0 2	0 0 1⅛
Muzaffarpur ...	8,86,858 0 0	2,18,432	11,05,290	34,545 0 0	17,121 0 0	0 0 3⅛	0 0 2⅛
Darbhanga ...	12,91,950 0 0	6,29,638	19,21,588	40,437 0 0	27,242 0 0	0 0 4½	0 0 2⅜
Monghyr ...	10,68,874 0 0	1,16,933	11,85,807	16.542 0 0	21,403 0 0	0 0 3½	0 0 1⅛
Bhagalpur ...	9,81,757 0 0	1,76,976	11,58,733	45,002 0 0	2,934 0 0	0 0 4⅛	0 0 4
Purnea ...	10,57,494 0 0	5,28,886	15,86,380	35,588 0 0	36,299 0 0	0 0 6⅛	0 0 3½
Santal Parganas	9,764 0 0	...	9,764	5,941 0 0	3,823 0 0	0 0 ⅜	0 0 ⅛
Hazaribagh ...	5,62,044 0 0	98,348	6,60,392	6,952 0 0	2,334 0 0	0 0 1¼	0 0 ⅜
Ranchi ...	3,94,206 0 0	63,284	4,57,490	2,379 0 0	5,399 0 0	0 0 ⅜	0 0 ⅛
Palamau ...	3,91,280 0 0	76,384	4,67,664	6,438 0 0	1,759 0 0	6 0 1⅜	0 0 ⅛
Manbhum ...	5,65,926 0 0	20,135	7,68,061	16,391 0 0	8,483 0 0	0 0 2⅜	0 0 1⅜
Singhbhum ...	3,39,298 0 0	56,926	3,96,224	225 0 0	633 0 0	0 0 ⅛	0 0 1/16

It will be seen from the above statement that the expenditure on sanitation by district boards, although some of them are in receipt of Government grants towards the maintenance of the health organisation scheme in their districts, is too little to provide for adequate public health amenities to the people.

CHAPTER VIII.

MALARIA.

Out of a total number of 729,454 deaths registered in the province during the year, the group of diseases included under "Fevers" was responsible for 584,873 deaths or 80·2 per cent of the total deaths as against 549,009 deaths or 78·2 per cent of deaths in the previous year. It is therefore quite apparent that fever undoubtedly remains the principal cause of mortality in the province. Although a large number of deaths from other diseases in which fever is a prominent symptom are included under this group, it is strongly believed that a large proportion of them is caused by malaria.

The severe epidemic of malaria witnessed during 1936 in certain parts of North Bihar particularly in the districts of Muzaffarpur, Darbhanga, Bhagalpur and Purnea occurred again during 1937 with almost equal severity. The endemic areas of Champaran district experienced a recurrence of the epidemic of the previous year whilst certain portion of North Monghyr also suffered from minor outbreak. The district of Manbhum also recorded an increased incidence. The province recorded during 1937 a death rate of 18·1 from fevers as against 16·9 in 1936. The higher incidence of malaria during the year is apparently reflected in the increased fever death rate. The highest rates for the year were recorded in the districts of Purnea (27·0), Palamau (24·0), Bhagalpur (23·1), Darbhanga (20·2), Muzaffarpur (19·7) and Hazaribagh (18·4).

The crude death rate from fever since 1901 for the six districts of North Bihar where malaria epidemics have occurred during the recent years, when graphically represented shows that the rates reached maximum peak during 1918 which coincided with the pandemic of Influenza and the lowest was recorded during 1931 but a definite upward trend has again become noticeable since 1932. This trend still continues and coincides with an increased incidence of malaria in these districts.

Sporadic cases of malaria occur in every district of the province almost throughout the year. A total of 1,302,498 cases of malaria was treated in the hospitals and the dispensaries of the province during the year and of these the highest number of cases (253,310) was treated in the district of Darbhanga whilst the least number (30,131) came for treatment in the district of Patna. So malaria more or less of static character may be stated to be prevalent throughout the province, the intensity depending upon the local topographical conditions and variations in the epidemiological factors of the disease from year to year. The tracts which show special proneness to the prevalence of the disease in epidemic form are (1) a narrow long belt in North Bihar contiguous to Nepal, (2) the endemic areas of Champaran and Purnea, (3) the group of villages on the outskirt of the Chota Nagpur plateau in the neighbourhood of the hills and the river ghats in Gaya district, (4) scattered patches in the districts of Ranchi, Hazaribagh, Palamau, Singhbhum and Manbhum adjacent to the range of the hills in the Chota Nagpur plateau.

Malaria occurred in epidemic form for the first time in Sitamarhi subdivision of Muzaffarpur district in May 1934. In the following winter the disease assumed epidemic proportion in certain parts of Madhubani and Samastipur subdivisions of Darbhanga district. The disease occurred in virulent epidemic form in greater portion of Supaul and Madhepura sub-divisions of the district of Bhagalpur in July 1935. The year 1936 witnessed fulminating epidemics of malaria not only in the districts of Muzaffarpur, Darbhanga and Bhagalpur but also the district of Purnea which in the past was regarded an endemic home of the disease but had experienced certain reduction in the incidence of the disease during the previous two or three years again became the scene of widespread outbreaks during 1936. All the outbreaks appear to be remarkably confined to the spill areas of the Kosi, Kamla and Bagmati rivers which on their way down from the points of their origins at the foot of the Himalayas in the north to the points of discharge in the Ganges in the south traverse the districts of Bhagalpur, Darbhanga and

Muzaffarpur, respectively. All these rivers show special tendency to change their course too frequently. The spill areas that have suffered from recurrent epidemics are presumed to have undergone certain subsidence as a result of the earthquake of January 1934 and in consequence to provide extensive breeding grounds for the malaria carrying mosquitoes. These districts have now come into great prominence because of the outbreaks of malaria epidemics. The Director of Public Health visited the epidemic areas more than once again during the year whilst the Assistant Directors kept constantly touring throughout the affected areas. 21 epidemic doctors of the Public Health Department were detailed for malaria duty whilst 1,981 lbs. of quinine and 50 lbs. of cinchona febrifuge were provided by the Department for free distribution in the affected areas. A brief description of the outbreak in each district where the disease assumed epidemic proportions during the year is given below :—

Muzaffarpur.—The year 1937 started with a continuation of the epidemic that occurred in Majorganj, Rampurhari, Athri, Aurai Baigna and Katra during 1936, but the disease showed signs of abatement in Baigna, Kanti and Rampurhari in January 1937. The treatment centres opened during the previous year in these areas, therefore, continued to function except those in Baigna, Kanti and Rampurhari south. The epidemic again became widespread in Majorganj areas in July and to combat this, three more centres namely one each at Majorganj, Madhopur Malinia and Dumri were opened in August. A large number of sub-centres were also set up throughout the affected areas and arrangement was made for the free distribution of quinine by house to house visits through the health inspectors. During the latter part of the year the disease suddenly flared up in Sharfuddinpur and it appeared in virulent epidemic form in Gharbhara at the end of the year. Treatment centres were opened to meet the needs of these places. Besides 186,926 patients treated in the permanent hospitals and dispensaries of the district 178,563 persons were treated in the temporary centres organised by the Government and the district health staff of the district. The whole of the quinine supply of the district was met by Government and a total of 625 lbs. of quinine was supplied during the year. A sum of Rs. 8,100 was also granted by Government to carry out anti-malarial measures in Majorganj and Rampurhari areas.

Darbhanga.—Malaria occurred in epidemic form during the year more or less in the same areas as in the previous year. Nearly two hundred villages were affected and all of them were again situated in the spill areas of Kamla and Balan rivers in Madhubani subdivision. Although the epidemic became more widespread during the year, the severity of the disease in individual villages was less marked than in the previous year. Besides, 253,310 patients treated in the permanent hospitals and dispensaries of the district 194,235 persons received treatment during the year, in 32 temporary treatment centres opened in the affected areas with the help of the Government and the district health staff. The total supply of quinine (403 lbs.) for the district was met by Government free of cost. Invalid diets consisting of sago, barley and sugar, etc., were also distributed on a limited scale to the malaria stricken population in the district, out of the funds provided by the provincial Branch of the Indian Red Cross Society.

Bhagalpur.—An outbreak of epidemic of malaria again started in the spill areas of the Kosi river from August 1937. The epidemic became more widespread in Supaul subdivision where 1,441 villages were affected while 694 and 14 villages also suffered from the epidemic in Madhipura and Sadr subdivisions of the district respectively. Out of 51,156 deaths registered from fevers in the district 11,410 deaths were reported to have occurred from malaria. Besides 99,279 persons treated in the permanent hospitals and dispensaries of the district 334,675 persons received treatment for the disease in the temporary treatment centres of which 13 functioned during the year. A total of 738 pounds of quinine and 273·5 pounds of cinchona febrifuge were administered free to the malaria patients during the year in the district

and of these 500 pounds of quinine sulph were supplied free of cost by Government whilst the rest was purchased out of the district board's fund.

Purnea.—The big epidemic which broke out in the latter part of the year 1936, continued up to April 1937. The epidemic was more severe in the northern and the eastern areas of the district than those in the southern and the western sides. Six temporary treatment centres and a number of sub-centres functioned in the affected areas throughout the year. Over and above, 196,926 cases treated in the permanent hospitals and dispensaries about one lakh of persons were also treated in the temporary centres. 378 pounds of quinine and 155 pounds of cinchona febrifuge were distributed free to the malaria patients and of these 138 pounds of quinine were supplied by Government.

Champaran.—There are isolated foci in the district where malaria has become more or less endemic and a high incidence is recorded almost throughout the year. These areas lie mostly on either side of the canal under the jurisdiction of Baghaha, Ramnagar and Shikarpore police-stations.

The disease occurred in a mild epidemic form in 447 villages during the cold weather of 1937 in these areas. 21 pounds of quinine and 10 pounds of cinchona febrifuge were administered free to 3,435 patients through the district health staff. Besides these, 94,059 persons received treatment for this disease in the permanent hospitals and dispensaries of the district.

Monghyr.—Incidence of malaria was reported from all the thanas of the district during the year, but its incidence was particularly high in the areas lying north of the Ganges under the jurisdiction of Khagaria, Chowtham and Bakhtiarpur thanas. The disease occurred in a sharp epidemic form at the end of the rains in a number of villages in these areas, but as the district does not maintain health organisation, the details of the epidemic could not be collected.

Manbhum.—Malaria is present in an endemic form in certain parts of the following thanas, viz., Bandwan, Patamda, Barabazar, Chandil, Balrampur, Bagmundi, Topchanchi, Raiganj and Tundi. Outbreaks of mild and localised epidemics were experienced during certain parts of the year in all these areas. A need for starting special treatment centres in the affected areas was not actually felt and the disease was only combated through the permanent dispensaries which were supplied with additional stock of quinine out of the free supply received from Government of India. A total of 65,842 patients were treated for malaria in the permanent hospitals and dispensaries of the district during the year.

2. *Sale of quinine.*—Sale of quinine treatments was continued at the various post offices in the province. These treatments were as usual supplied to the post offices by the Civil Surgeons who obtained their requirements from the Presidency Jail at Calcutta. Each treatment consisted of twenty tablets of four grains each and each tube containing twenty tablets was sold at five annas and three pies.

332·5 pounds of quinine sulphate in tablet form were sold during the year under review as against 406·9 pounds in the previous year. The largest quantities were taken by the districts of Ranchi, Muzaffarpur, Bhagalpur, Manbhum, Purnea and Darbhanga. The fall in the quantity sold during the year is presumed to be due to the large quantity of quinine that had to be distributed free in the malaria affected areas of the province.

Spleen census.—The Assistant Director of Public Health, Chota Nagpur Circle, carried out spleen census during his vaccination tours in the districts of Ranchi, Santal Parganas, Singhbhum and Hazaribagh. He examined spleen of 9,516 children who came from 1,173 villages and of these 574 children showed enlargement of spleen. This showed a spleenic index of 6·03 for the total number of children examined, but when calculated for the district figures, the index came to 9·16, 2·62, 8·29 and 5·22 for the districts of Ranchi, Santal Parganas, Singhbhum and Hazaribagh, respectively.

CHAPTER IX.

Maternity and Child Welfare.

1. The Bihar and Orissa Maternity and Child Welfare Society which was formed in August 1928 continued to function during the year with Lady Hallett as the President, the Inspector-General of Civil Hospitals as Honorary Secretary and the Accountant-General, Bihar, as Honorary Treasurer. Six centres worked under the auspices of the society in the province namely, three in Patna, and one each at Muzaffarpur, Monghyr and Ranchi. The income of the society amounted to Rs. 12,273 during the year including Government grant of Rs. 11,100 and the expenditure amounted to Rs. 15,780. The excess of the expenditure over the income was met from the opening balance which stood at Rs. 5,516-8-0. The Society as usual made contributions to the various centres which also received financial help in the shape of subsidies from the local bodies concerned, donations raised from the local people and assistance received from the Victoria Memorial Scholarship funds and the provincial branch of the Red Cross Society. The municipalities of Ranchi, Darbhanga, Purulia, Dhanbad and Patna Administration Committee also continued to maintain a midwifery service for their respective areas. One midwife was employed by each of these municipalities. Informations received from the chairmen of the local bodies and the Civil Surgeons show that 13 maternity and child welfare centres functioned during the year 1937 in the province and of these 11 were located in the urban areas whilst two were situated in the rural areas. During the same period 13 health visitors, 42 trained midwives and 86 trained indigenous *dais* were employed throughout the province and of these only 13 trained midwives and nine trained *dais* worked in the rural areas. A total of 80 hospitals having 265 beds for admission of maternity cases functioned in the province during the year under report and of these 12 hospitals having 32 beds for the maternity cases were situated in the rural areas. Sixty-five lady doctors were employed in the province and of these four were employed by Government while 43 and 18 were employed by the various local and non-official bodies, respectively. Seventeen of them are medical graduates. Over and above these, the industrial areas under the Jharia Mines Board of Health and Tata Iron and Steel Company maintained their own maternity and child welfare organisations. The three maternity circles, at Sijua, Kenduadih and Jharia continued to function during the year under the Jharia Mines Board of Health. Each of these circles remained in charge of a qualified health visitor. The Sijua circle maintained three child welfare and maternity centres whilst the Kenduadih and Jharia circles maintained six and one such centre respectively. Besides these, the maternity and child welfare centre in the Dhanbad municipality continued to be worked by a qualified midwife under the supervision of the Chief Medical Officer of the Board. The maternity ward of the Tata Hospital at Jamshedpur remained also open throughout the year and the lady doctor employed there continued to conduct labour cases free at the houses in the local areas. There is a proposal to open two new welfare centres at Jamshedpur.

No means exist at present to ascertain the maternal mortality rate either for the urban or the rural areas, but the infant mortality rate for the province during the year was 131 in the urban and 115·3 in the rural areas, while the death-rate for the children under five years of age 39·5 for the males and 34·4 for the females. No special method was employed during the year to ascertain the infant death-rate. The village chaukidars, as usual, reported the deaths mentioning the cause of the death as stated by the parents and guardians to the thana officers through *hathchittas*. The thana officers in turn reported these to the Civil Surgeons who tabulated the figures for the whole district and sent a weekly report to the Director of Public Health.

A brief note on the maternity and child welfare organisation in the various districts is given as follows :—

Patna.—There are three child welfare centres within the Patna municipal areas, namely, Lady Stephenson Centre, Lady Wheeler Centre and Lady

Sifton Centre. Each of these centres was in charge of a qualified lady health visitor. The average daily attendances at these centres were 70, 53·4 and 50·4 respectively. The health visitors besides attending to the centres and conducting knitting and sewing classes visited the neighbouring *bustee* areas also. The Maternity Supervisor visited these centres as honorary doctor and attended the children suffering from common ailments. All the tubercular babies, brought to the centres were given special food and medicines as advised by the Maternity Superviser. Indigenous *dais* were also trained in these centres and they were allowed annas four for attending each class held at the centre.

Gaya.—There is no maternity and child welfare centre in Gaya. One day during the week, however, is reserved for attending to the ante-natal cases at the Lady Elgin Zanana Hospital, Gaya, where during 1937, 222 labour cases were conducted and 492 ante-natal cases were attended to. Gaya municipality also appointed four midwives during the year for conducting labour cases at the houses.

Shahabad.—There is no maternity and child welfare organization in the district but the District Board maintained a number of trained *dais* who were kept attached to the board's hospitals and dispensaries. These *dais* visited the expectant mothers and conducted the normal labour cases within the radius of five miles.

Bhagalpur.—No maternity and child welfare centre exists in the district. The Bhagalpur municipality maintained one midwife who attended 299 calls and conducted 231 normal delivery cases during the year.

Purnea.—Steps were taken by the Purnea municipality to open a maternity and child welfare centre in the town during the year, and it is expected that it would soon be functioning.

Monghyr.—The Lady Stephenson Child Welfare Centre was kept open throughout the year. The lady health visitor in charge of the centre resigned during the year and attempt is being made to appoint a substitute. This centre moved to its own constructed building which was opened by Lady Sifton in February 1937. The daily average attendance to this centre increased from 31 to 46 during the year.

Muzaffarpur.—A maternity and child welfare centre has been in existence in Muzaffarpur town since 1931 and a lady health visitor is employed. The centre was shifted to its own building during the year. This building is fitted with bathing facilities, tap water-supply and electric installation and has an attached quarters for the health visitor. Four rooms have also been constructed to accommodate the pupil *dais* while undergoing training. Four *dais* were trained in this centre during 1937 and 12 pupil *dais* were on the roll at the end of the year.

Darbhanga.—There is no maternity and child welfare centre in the district but the municipality of Darbhanga maintains a midwife who delivered 109 normal labour cases at the houses and took 9 abnormal cases to the Darbhanga Medical School Hospital. The district board also maintains a midwife to work in the rural areas with a view to train the indigenous *dais*. She delivered lectures to 265 *chamains* during the year.

Champaran.—No maternity and child welfare centre exists in this district but a trained midwife is employed by the district board who toured throughout the district and trained 129 indigenous *dais* in the methods of clean midwifery.

Ranchi.—The maternity and child welfare centre opened in Ranchi town in 1935 continued to function during the year. A lady health visitor was maintained and the daily average attendance at the centre amounted to 50 as against 37 of the previous year. The Ranchi municipality maintained two midwives while the Doranda Notified Area maintained one midwife to provide domicilliary attendance to the labour cases in the town.

Manbhum.—There is no maternity and child welfare centre in the district. A midwife is attached to the Sadr Hospital, Purulia, who attends to delivery cases at the houses in the town.

The Bihar and Orissa Nurses and Midwife Registration Act was passed in 1935 and a Nurses Registration Council was constituted in collaboration with the Bihar Medical Registration Council during the year under review. A set of rules framed under the Act is receiving consideration of the Government and steps have also been taken in some of the municipalities to enforce by-laws framed under the Act for the regulation of the practice of midwifery within the municipal areas. Classes for the training of indigenous *dais* continued to be held during the year in accordance with the Victoria Memorial Fund syllabus in most of the sadr and subdivisional hospitals, 46 *dais* were trained during the year as against an average of 47·6 of the previous three years in the various hospitals of the province. Each pupil *dai* was as usual awarded stipend of Rs. 5 to Rs. 10 a month from the Victoria Memorial and local bodies fund during the training periods and a certificate was issued by the Director of Maternity and Child Welfare Bureau, Delhi, on passing examination held locally under the Victoria Memorial Fund rules on completion of a year's training.

CHAPTER X.

SCHOOL HYGIENE AND MEDICAL EXAMINATION OF SCHOOL CHILDREN.

1. Government maintain a special staff of officers for the medical examination of scholars of the High Schools since 1920. This system was subsequently extended to the Middle English Schools at places where there is also High English School.

There is one School Medical Officer of Assistant Surgeon grade and one Assistant School Medical Officer of sub-assistant surgeon class in each of the four divisions of the province. There is also a Lady School Medical Officer for the girls' schools of the province. These officers visit all the high schools and most of the Middle English Schools in their respective divisions. Besides these some of the medical officers of health also carry out medical examination of the students of the middle schools which are situated at places where there is no high school.

2. *Medical Examination of Scholars.*—Usually all the new scholars admitted to the schools since the previous visit of the School Medical Officers are thoroughly examined and a complete medical history of each new entrant is recorded on a prescribed form. All scholars found to be suffering from physical defects at a previous inspection are re-examined and a further note on the defects is recorded. At the end of the inspection, parents or guardians of boys suffering from physical defects are informed of the particular defects the boys are suffering from and they are recommended to consult their medical attendants or to take the boy for treatment to the nearest hospital or dispensary. The medical officers of the dispensaries are required to note on the counterfoils of the forms, the treatment the boys have received with results. Attempts have also been made since 1933 to start school clinics attached to each of the divisional hospitals which the School Medical Officers have been asked to attend during their stay at the headquarters.

The following statement shows the number of children examined, number recommended for treatment and the number found on re-examination to have been benefited from the treatment during 1937.

Divisions.	No. of children examined.	No. of children recommended for treatment.	No. of children recommended for treatment found on re-examination to have actually received treatment.	No. of children found to have been benefited from treatment.
Patna . ..	3,046	1,275	1,275	1,006
Tirhut	2,891	1,051	1,051	287
Bhagalpur	3,081	1,491	793	411
Chota Nagpur	2,411	1,141	900	688

From the statement noted above it would appear that out of 11,430 boys examined during the year, 4,958 or 43·4 per cent suffered from some kind of ailments. The number of children suffering from various conditions is noted as below :—

	No. of children found suffering from—	Percentage of children found to be suffering from—
1. Poor nutrition	1,905	38·4
2. Errors of refraction	767	15·4
3. Eye disease such as Trachoma, Conjunctivitis, Blephritis and Corneal Opacity.	164	3·2
4. Pyrrhea and carries teeth	613	12·3
5. Enlarged tonsils	1,310	26·4
6. Adenoids	185	3·7
7. Enlarged glands in the neck	365	7·3
8. Functional heart troubles	112	2·2

Over and above these 22 children suffered from the organic tensions of the heart, 4 from Kala-Azar, 3 from Leprosy and 2 from Pulmonary Tuberculosis, whilst 120 showed enlargement of spleen and 115 were found to be unvaccinated. During the same period the various health officers employed by the district boards examined 15,574 children and of them 2,690 were found to be suffering from different diseases. The Lady School Medical Officer examined 947 girls out of whom 655 or 69·16 per cent were found to be defective or diseased. Majority of them were found as usual to be suffering from poor nutrition, carries teeth, enlarged tonsils and errors of refraction. Six girls were detected to be suffering from pulmonary tuberculosis.

Lectures in Hygiene.—The School Medical Officers also delivered lectures on hygiene, sanitation and epidemic diseases common in India to the students of the X and XI classes of the high schools. 1,579 lectures were delivered during the year and of these 247 lectures were illustrated with magic lantern slides. Attendance at ten such lectures is compulsory for every boy before he is allowed to sit for the Matriculation examination, but as hygiene is not included within the subject for the Matriculation examination, the lectures do not receive quite the attention they deserve. A good deal of useful information about public health subjects is however imparted through these lectures and they are expected to awaken an interest in the minds of the boys for healthy habits and prevention of diseases. During the summer vacation, these officers devoted themselves as in previous years to special propaganda work by arranging lectures and demonstrations for the village Gurus, Maulavis and sub-inspectors of schools in different selected centres.

The school and hostel buildings are regularly inspected by the School Medical Officers during the visit to each school. 241 such school premises were inspected during the year. These inspections have definitely helped in recent years in effecting improvement in the standard of general sanitation of these premises. Provision for sanitary conveniences has much improved and a satisfactory arrangement now exists in most of these schools for drinking water-supply.

The School Medical Officers during their inspection of each school also look into the arrangements made for the physical exercises, games and suitable sitting accommodations in the class rooms and by their constant advice they try to impress upon the headmasters, guardians and parents that in their zeal to impart mental education, the physical development of the child should not be neglected.

The scheme for providing midday school lunch based on a fee of annas eight per school child per month introduced in Purulia Zilla school in 1934

has now been taken up by quite a number of the high schools in the province. The system is reported to be working very satisfactorily.

CHAPTER XI.

HEALTH PROPAGANDA.

A Public Health Bureau on a modest scale is attached to the office of the Director of Public Health. The aim of this Bureau has been to awaken public health conscience in the masses, to focus attention on public health matters and to carry out health education of the general public by persistent presentation of simple sanitary principles by such methods as lectures, leaflets, posters, magic lantern demonstrations and press publications.

The Officer in charge of the Public Health Bureau carried out propaganda work as usual during the year. A large number of pamphlets and leaflets were issued from time to time to the local bodies for distribution among the visitors at the different exhibitions organised in connection with fairs and festivals in the province and many popular articles on public health subjects were contributed to the local press.

Lectures illustrated with magic lantern slides and demonstration on public health subjects were given to the cadets of the Police Training College at Hazaribagh as in the previous years. Hygiene lectures and magic lantern demonstrations were also given by the Officer in charge, Public Health Bureau at a special course organised by the Co-operative Department for the training of the rural walfare workers at Pusa.

The Assistant Directors of Public Health gave short lectures on sanitation and hygiene during their vaccination inspection tours in rural areas. 315 such discourses were held during the year. They are also provided with a magic lantern and complete sets of slides on all important topics of health.

2. *Red Cross Society.*—The Red Cross Health Museum located at the Patna Museum was open to visitors throughout the year 1937. There was no addition to the models, but steps were taken during the year to replace the various illustrated and coloured posters that had become time-worn and tattered, by new ones. The Health Museum continued to attract a large number of visitors from all parts of the province. 143,082 persons as against 132,781 in the previous year visited the museum in 1937. The Officer in charge of the Public Health Bureau, as usual attended the museum on all important occasions throughout the year and arrangement was also made to distribute leaflets on public health subjects in English and Vernaculars among the visitors.

The anti-tuberculosis sub-committee formed under the auspices of the Society continued to direct campaigns against the spread of tuberculosis in the province. The Organising Secretary, King George Thanks-giving Anti-tuberculosis Fund, toured in Ranchi, Itki and Patna in July and a combined provincial anti-tuberculosis and leprosy officer was employed from October 1937. Steps were taken to allocate Rs. 10,000 to each of the 16 districts of the province out of the funds raised for King George V Memorial Fund to finance the construction of the approved type of building for the establishment of the tuberculosis clinic at each of the district headquarters towns and branch association of the King George V Memorial Anti-tuberculosis Fund in twelve out of the sixteen districts of the province. The recurrent costs of the district clinics are to be met partly from contributions promised by local bodies and partly from funds locally raised and from Government contributions. Copies of the pamphlets entitled Pulmonary Tuberculosis and Pregnancy in India and of British Journal of Tuberculosis were distributed among the officers of the Public Health Department. Two thousand copies of the Urdu translation of the pamphlets entitled "Tuberculosis Problem in Bihar and Orissa" were also printed and distributed chiefly among the Urdu knowing people of the province through the local bodies and middle schools.

CHAPTER XII.

PUBLIC HEALTH ADMINISTRATION.

1. The statement below shows the receipts and expenditure under the head "39—Public Health (Medical)" for the years 1935-36 and 1936-37.

Head.	Receipt.		Head of expenditure.	1935-36.		1936-37.	
	1935-36.	1936-37.		Budget provision.	Expenditure.	Budget provision.	Expenditure.
1	2	3	4	5	6	7	8
	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
Sale-proceeds of sera and vaccine, etc.	38,384	45,452	Public Health Establishment.	1,64,434	1,68,253	1,70,864	1,74,916
			Medical examination of scholars and teaching of hygiene in high schools.	43,000	38,261	39,778	35,707
			Bubonic plague ..	6,000	9,383	7,000	6,615
			Malaria ...	10,600	6,429	9,000	24,061
			Other Epidemic diseases.	1,29,463	1,16,737	1,38,638	1,07,017
			Publicity campaign	1,802	2,094	1,840	1,719
			Public Health Laboratories.	22,097	18,872	18,129	15,218
			Total ...	3,77,396	3,60,029	3,85,249	3,65,253

All requisitions of the Director of Public Health were met by the Government and funds were made available in most cases.

2. The three Assistant Directors of Public Health, one for South Bihar Circle, with headquarters at Patna, one for North Bihar Circle, with headquarters at Muzaffarpur, and one for Chota Nagpur Circle, with his headquarters at Namkum in the Ranchi district, continued to function as in previous years.

The Assistant Directors of Public Health are employed to investigate into the epidemics, suggest measures of control and to see that the actions are adequate to combat the epidemics. They also supervise the prophylactic measures such as vaccination, cholera and plague inoculations. They inspect and report on all nuisances occuring in their areas. A systematic inspection of all local bodies, fairs and melas and high schools are included in their legitimate duties. They also carry out propaganda work by lectures and magic lantern demonstrations. Regular inspection of mines and factories in their respective circles have also been added to the routine duties of the Assistant Directors of Public Health. The supervision and advice rendered by these officers have done much in recent years to assist the local bodies in effecting improvement in sanitation and health of their areas.

There are four School Medical Officers and four Assistant School Medical Officers for the four divisions of the province. There is also a Lady School Medical Officer for the girls' schools. In addition to her own duties she is also employed as Medical Inspectress of Factories in accordance with the recommendation of the Royal Commission on Labour to examine the health of the female employees of factories in Patna district.

Epidemic doctors of sub-assistant surgeon grade are employed temporarily by Government and they are detailed to help local bodies in combating epidemics in the province. Over and above these one hundred reserve of vaccinators are provided for duties in the districts, who in addition to vaccination work are also trained to carry out disinfection during epidemics.

A medical officer of health is in charge of the Public Health Bureau which is attached to the office of the Director of Public Health. He contributes popular articles to the press on public health subjects and prepares and distributes posters, pamphlets and leaflets to the local bodies. He delivers lectures on hygiene to the police cadets at the Police Training College, Hazaribagh, and also at melas and fairs with the aid of magic lantern slides.

Seven medical officers of the Government Public Health cadre have been lent to the district boards of Muzaffarpur, Saran, Champaran, Gaya, Bhagalpur, Shahabad and Darbhanga to work as health officers of the district boards.

Three medical officers of the cadre have also been lent to the municipalities of Patna, Gaya and Ranchi to work as health officers.

A medical officer was also employed as Chemical Analyst at the Public Health Laboratory where water and articles of food are analysed. The services of this officer were transferred under the Bengal Government in September 1935 and since then his assistant who is a non-medical man was temporarily allowed to work in his place. A permanent incumbent to this post who is a graduate in science as well as in medicine and also holds diploma in public health was appointed in April 1937. A medical officer of the cadre has also been appointed as Officer in charge of the Bacteriophage Laboratory and a medical graduate has been temporarily appointed as his assistant.

A medical officer of the cadre also works as Superintendent of Vaccine Depot at Namkum. Vaccine lymph is manufactured and distributed throughout the province from this depot.

CHAPTER XIII.

Annual Vaccination Report is submitted as an annexure to this report.

CHAPTER XIV.

OTHER PUBLIC HEALTH SERVICES.

1. *Jharia Mines Board of Health.*—The Jharia Mines Board of Health controls the sanitation of Jharia and the neighbouring areas which extend over an area of 787 square miles and covers the whole of the Dhanbad Subdivision with the exception of the Dhanbad municipality. According to the census of 1931, the population of this area is 504,376 and the estimated population for 1937 excluding that of the municipality of Dhanbad is 537,892 as against 531,401 of 1936.

The total number of births during the year was 14,791 giving a birth rate of 27·57 as against 25·93 of the previous year while the total number of deaths was 8,320, recording a death rate of 15·50 as against 16·10 of the preceding year. The death rate was reduced by 0·6. This is due to the fact that there was no epidemic in the mining settlement during the year. The infant mortality rate was reported to be 92 as compared with 102 in the previous year.

The total number of deaths from cholera, small-pox, fevers and respiratory diseases was 14, 6, 114 and 279, respectively, as against 37, 322, 595, and 428 of the preceding year, 33,991 cases of malaria and 267 cases of venereal disease were reported among the coolies and labourers and a large proportion of the fever deaths is presumed to have occurred as usual from malaria. The preventive measures against cholera and small-pox were taken by the health staff of the mining board, 2,900 anti-cholera inoculations and 22,329 vaccination operations were performed during the year.

Drainage.—The new drainage scheme which was completed in 1935 was maintained in full functioning order during the year and steps were taken to construct road side drains in Poddar Kulhi areas.

Water-supply.—In the course of the year, 7 more collieries were connected to the Jharia Water Board mains, bringing thus the total number of the connected collieries to 192. It is considered that the collieries not yet linked up with Jharia Water Board supply constitute a source of danger to the neighbouring ones. Notices were, therefore, served on five collieries by the board requiring them to link up with the Jharia Water Board mains. The problem of adequate supply of pure water to the various outstill liquor shops still awaits solution. No advance was made in this direction during the year because the term and conditions of supply proposed by the Deputy Commissioner of Manbhum were not acceptable to the Jharia Water Board on grounds of anticipated loss of revenue. The board reserved one tank for drinking water-supply at Katras throughout the year. Four tanks were also reserved for this purpose in the colliery areas during the cholera season.

Sanitation.—Two rubbish lorries for carrying the refuse to the dumping ground were maintained throughout the year in Jharia town and steps were taken to replace the existing old lorries by new ones. Refuse carts were also maintained for the narrow lanes where the lorries find difficult to ply. All the 120 public latrines provided by the board were maintained in satisfactory state of repairs throughout the year.

Housing.—The five years housing programme introduced last year continued to make satisfactory progress during the year under report. Licenses for 29,016 dwelling houses were issued during the year and of these, 24,996 licenses were issued for permanent structures.

Maternity and Child Welfare.—The work in connection with child welfare scheme was continued as in previous year. The whole area is divided into three circles, namely Sijua, Kenduadih and Jharia. Sijua circle has three centres while Kenduadih has six centres and Jharia circle has one centre. Three qualified health visitors were in charge of these circles. They regularly visited the centres, supervised ante-natal and post-natal conditions and conducted the practical training of the indigenous *dais*. Eleven *dais* were granted certificates during the year on the result of the examination held at the end of the training course. Most of the normal labour cases were attended by the *dais* who had received training in previous years. These *dais* have all been supplied with fully equipped boxes containing outfit required for conducting normal labour cases and are given annas four as a reward from the board's fund for conducting each labour case under the supervision of health visitors. Soap, milk and stock mixtures were also distributed to mothers and children at all centres throughout the year.

Food adulteration.—889 samples were analysed at the board's laboratory and 173 of these were found to be adulterated. 161 prosecutions were instituted and of these convictions were obtained in 127 cases.

Leprosy.—Four outdoor leprosy clinics namely one each at Pandra, Jharia, Tetulmari and Dhanbad were maintained throughout the year. The clinics were as usual twice weekly. 815 new patients attended the clinics and altogether 28,711 treatments were given at these centres.

2. *Public Health Laboratory.*—During the year 2,905 samples were chemically and bacteriologically examined as compared with 3,035 samples in the preceding year and of these 18 were received from private individuals or firms for analysis on payment of fees.

Water.—One thousand two hundred and twenty-eight samples of water were examined bacteriologically and of these 474 samples were also examined chemically. Samples drawn from various sources are shown as follows :—

Waterworks	863
Jails	153
Other sources	76

Food-stuffs.—The total number of samples examined was 1,645 as opposed to 1,825 of the previous year. The samples were obtained from 19 districts of Bihar and Orissa. No sample was received from the district of Palamau and Angul.

Ghee.—Six hundred ninety-six samples were examined and of these 368 or 52·87 per cent were found to be below the standard or adulterated as opposed to 45·14 per cent of the previous year. 167 samples were found to be of doubtful purity.

Mustard oil.—493 samples of mustard oil were examined out of which 64 or 12·98 per cent were found adulterated or below the standard as opposed to 40·30 per cent of the previous year. Five samples were found to be of doubtful purity.

Sweets.—127 samples of sweetmeats (Methai, Puri and Kachauri, etc.) were examined with a view to find if they were made of pure ghee or oil; and of these 88 samples or 69·29 per cent were found to have been made of ghee or oil which was below the standard or adulterated as opposed to 49·61 per cent of the previous year.

Milk.—35 samples of milk were examined out of which 23 or 65·15 per cent were found to be adulterated.

Atta.—124 samples of wheat flour were examined and of these only one or 0·08 per cent was found to be adulterated.

Miscellaneous.—17 samples of groundnut oil were analysed of which 16 were found to be genuine and one non-genuine. Out of two samples of butter analysed, one was found to be below the standard while out of nine samples of linseed oil analysed two were found to be genuine, four adulterated and three of doubtful purity. Three samples of sago, three samples of suji, one sample of kachra oil and one sample of honey was also examined and all of these were found to be satisfactory. Six samples of disinfectants fluids were examined with a view to find their Radial Walker coefficient and two dead rats sent from Champaran were examined to see if they contained plague bacilli.

Analysis of excisable articles.—The laboratory for Excise work started on a temporary basis in December 1934 continued to function throughout the year. Four hundred and ninety samples of excisable articles were analysed and 304 instruments such as thermometers, hydrometers and saccharometers were standardised during the year in the laboratory. A sum of Rs. 2,528 was charged as fees for the excisable articles analysed for the different distilleries of the province.

3. *Bacteriophage.*—The Bacteriophage Laboratory was mainly engaged in the production of choleraphage on a large scale as in the previous year. 124,090 phials of choleraphage of 50 c.c. each were prepared and 121,921 phials distributed during the year on requisitions received through the Director of Public Health to various towns and districts of the province. Choleraphage was also prepared in ampouls of which 500 were issued during the year. Choleraphage was supplied free to all the local bodies in the province and a sum of Rs. 12,050 was contributed by them towards the cost of its production. It was also sold to private individuals and to Orissa Government worth Rs. 4,427. Besides the production of choleraphage, the basic research on bacteriophage was also continued. In pursuance of the recommendation made by the Advisory Committee in its meeting held at Central Research Institute, Kasauli, to adopt a uniform method for serological examination of cholera, vibrio dried 'O' antigen and "Inaba", were obtained from the Director of Central Research Institute and special anti-sera were produced for the diagnosis and isolation of different strains of the vibrios. The virulence of the different choleraphage was first increased and then they were naturalised by passing through cholera patients. Seeds for inoculations were obtained from the naturalised types and the brew of the phage suspension thus obtained was found to be highly rich (Nx 10 corpuscles per c.c.). Experiments by passing brew containing suspension of phage through Pasteur Chamberland Candles of varying porosity showed that L_2 and L_3 candles yielded highest quantity of phage in sterile filtrate. Experiments carried out on storage of these phage also showed that it retained its maximum potency when kept under cold condition inside a frigidaire up to one and half years, but when kept in the open under room temperature its potency deteriorated from $1{\cdot}3\times10^{10}$ to 2×10^{10} phage corpuscles per c.c. in nine months. This phage was considered to be too weak to have any therapeutic value. The theory was recently advanced by Kendal of Chicago that phage could be isolated from autoclaved sewage. Experiments carried on the lines suggested by Kandall failed to demonstrate presence of any phage in autoclaved sample of sewage. Phage was found to get killed at a temperature of 70° in 10 to 15 minutes. It therefore could not keep alive in the autoclaved sample of sewage at a temperature of 120° for half an hour.

Dysentery phage.—A large number of cases simulating signs and symptoms of cholera at the beginning stage of the attack occurred during the year in Mokama thana of the Patna district. These cases resisted choleraphage and most of them after a few days from the attack passed mucus and blood. Some of the samples of stools obtained from them when examined in the Bacteriophage Laboratory showed presence of dysentery bacilli of Shiga and Flexner types. Dysentery phage prepared from these strains when sent out for use in these areas controlled the incidence of the disease in a short time. One hundred ampoules of dysentery phage were issued from the laboratory for use in the province during the year, and steps were also taken to mix dysentery phage active against Shiga and Flexner strains in the proportion of 1:16. It was also found that dysentery phage when mixed in this proportion made it active against bacillary dysentery without lowering its potency against cholera.

Typhoid phage.—A limited number of typhoid phage prepared from the stools of the typhoid cases in Patna were issued by the laboratory and tried by some of the local physicians. The medical officer in charge of the Gardanibagh dispensary used typhoid phage prepared at the laboratory on 25 of his cases and of these only one case died. Early use of typhoid phage prevented occurrence of complications. Results appeared to be encouraging but further trials are obviously indicated before any opinion can be expressed on its definite efficacy.

Field Work on Choleraphage.—The use of choleraphage was introduced in this province 8 years ago. The results of its use both as a curative agent as well as a prophylactic agent appeared to be highly encouraging and since then its use has been extended to the province in an increasing degree. It is now definitely found that its use as a curative agent gives the best results even in the rural areas when used in early stages of the attack, but where dehydration has taken place and collapse has set in, its use needs supplementing with transfusion of saline. As a prophylactic agent it invariably cuts short the epidemics, provided immediate steps are taken to phage the total population exposed to the infection. Choleraphage was extensively used during the year in the whole of the province, but on account of limited number of staff, it could not be possible to compile full statistical details of the results obtained from its use in the different districts. Water supply of the Sonpur mela areas and Gaya station areas were daily phaged during the Sonepur and Pitripaksha melas. The infection of cholera was present in both places during the mela periods but the incidence of the disease did not assume high proportions. Very few anti-cholera inoculations were performed in either of these melas. Cholera occurred in epidemic form during winter months of 1937 in Patna town. Choleraphage was put in the proportion of 50 cc. for every 1,000 gallons of water in the reservoir tanks thrice daily on every alternate day. Samples of water were collected next morning from the different taps in sterile phials and were tested for the presence of choleraphage. Every tiny loop of this water when examined showed presence of choleraphage. In November 1937 reports were received that the use of choleraphage did not give satisfactory results in certain areas of Bhagalpur where cholera had broken out in epidemic form. Five samples of stools from cholera cases were obtained from Bhagalpur hospital. The culture was found to be positive of cholera vibrio, but it proved to be phage "A" resistant. Immediate steps were then taken to modify the phage "A" to adapt to the new strains of the vibrio contained in the Bhagalpur samples, and when the modified phage was sent to that area cholera stopped almost at once.

4. *Nutrition Research.*—A medical officer of health of the public health cadre was deputed to undergo a special course of training in nutrition at the Nutrition Research Institute, Conoor, for a period of three months in the month of April 1937. This course was arranged by the Government of India under the auspices of the Indian Research Fund Association and comprised of training in animal feeding experiments, supplementary dietetics to the undernourished children, diet survey and assessment of nutrition of growing children. On return from training this officer was appointed nutrition officer for the province on a temporary basis and was placed on special duty to collect available data on dietary and state of nutrition of the scholars residing in the different hostels at Patna. Diet survey carried out in Patna, Science and B. N. College hostels showed that the average cost of board per student per month varied from Rs. 9 to Rs. 12 but the average intake of the diet when reduced into proximate principles of food, i.e., protein, fat, carbohydrate, mineral salts and vitamins lacked in adequate supply of protective food. It is expected that based on the data collected during the survey, the department will be soon in a position to issue concrete suggestions for well balanced diet for the college hostel boarders without increasing the monthly expenditure. The nutrition officer also delivered lectures on elementary principles of dietetics in these hostels. Chemical assessment of the food value of forty articles of food mostly cereal, grains and vegetables purchased locally in Patna was also made by carrying out analysis at the Public Health Laboratory.

CHAPTER XV.

General Remarks.

Epidemic Dropsy.—Beri-Beri or epidemic dropsy did not occur in epidemic form in any of the districts of Bihar in 1937, but sporadic cases were reported from all the districts. A total of 828 cases were treated in the hospitals and dispensaries and of these six cases ended in deaths. The highest number of cases were reported from Manbhum (121), Patna (101), Bhagalpur (99) and Monghyr (83) whilst the lowest number of cases occurred in Palamau (2), Ranchi (6), Purnea (13) and Gaya (23).

2. *Incidence of cerebro-spinal fever.*—Three hundred and sixty-three cases of cerebro-spinal fever were treated in the hospitals and dispensaries during the year as compared with 17 of the previous year and of these, 14 died. The highest number of cases occurred in the district of Palamau (70), Shahabad (57), Patna (55) and Manbhum (47), whilst the lowest number of cases were reported from the districts of Saran (2), Singhbhum (5), Ranchi (5) and Hazaribagh (7). As compared with other months the incidence of the disease was higher in the months of May and December. Five deaths from cerebro-spinal fever also occurred in Dhamonain colliery area in the Asansol mining settlement among the labourers imported from this province into this settlement. All these cases occurred in the month of March. Three of these belonged to the district of Monghyr whilst the two came from Bhagalpur district.

3. *Leprosy relief.*—The Bihar and Orissa Leprosy Relief Committee was constituted by the Government of Bihar and Orissa in August 1926 as the provincial branch of the British Empire Leprosy Relief Association to receive and expend fund received from the Indian Council and discharge all duties connected with the leprosy work in the province. The annual meeting of the Committee was held in October 1937 under the presidentship of the Minister of Local Self-Government.

Forty-one outdoor leprosy clinics function during the year as against 40 of 1936 and 17,967 patients were treated in them as against 17,072 of previous year. Over and above these outdoor clinics seven leper asylums also remained open throughout the year and a total of 2,415 in-patients and 2,335 out-patients received treatment in these institutions during the year, as against 1,850 in and 2,223 out-patients in the preceding year. Two sub-assistant surgeons were deputed during the year for special training in leprosy to the School of Tropical Medicine, Calcutta. A leprosy hospital constructed under the auspices of Dhanbad Leprosy Relief Association on a site provided by the Jharia Mines Board of Health was opened in October 1937. This hospital provided accommodations for the in-patients. Small leprosy surveys were also undertaken during the year in Dhanbad areas under the chief leprosy officer of Dhanbad Leprosy Relief Association, in Assabani area of the district of Santal Parganas under the medical officers of the leper colony at Saldoha and in groups of villages in sadr sub-division of Manbhum district under the Medical Officer of the Purulia Leper Home.

4. *Inspection of Mines.*—The Assistant Director of Public Health, Chota Nagpur Circle, inspected 25 mines in the district of Singhbhum as an ex-officio Inspector of Mines under the Mines Act and submitted reports on his inspections, copies of which were forwarded to the Chief Inspector of Mines. As a result of the recommendations made in the inspection reports considerable improvements are reported to have been effected in housing arrangements, conservancy, water-supply and provision for the speedy control of infectious diseases in these areas.

5. *Rural and urban housing conditions.*—The houses in the villages mostly remain in the same condition as they were decades ago. Most of them consist of two or three roomed huts with mud walls, mud floors and thatched roofs. A few of the roofs are tiled and belong to the prosperous land-owning classes. The huts are mostly badly designed and are of ten huddled together in more or less compact area, situated in the midst of the fields which provide means of livelihood. They are usually located on high grounds as precaution against floods but very little provision exists in them for ventilation. The villagers sleep outside during the hot and dry months of the year, but they aggregate together for warmth inside their huts during the winter months. Cattle lyres are provided near some of the huts but in most cases cattle, goats, fowls and dogs share the huts with the people. No building rules or by-laws are enforced in the rural areas. There are no regular roads inside the villages. The lanes and pathways as they are in existence are not paved and become quigmire in the wet weather. No organised conservancy service exists in the villages nor are drains. The lanes and pathways are seldom swept and refuse and house sweepings are deposited for the most part on some convenient spot either in or outside the huts. There are no latrines. The fields and vacant plots of land in close proximity to the villages, often within a few yards from the huts, are used for purpose of nature. Cattle-dung on account of its value as a manure is also stocked either inside the hut itself or somewhere very near it. Only the fairly well-to-do inhabitants use pit privies which are known as Sandas. The housing conditions in the urban areas are very much better. The urban population mainly consists of the rich land owners, who in most cases being dissatisfied with the lack of modern amenities, in the villages, have migrated to the towns. Business or professional men and various Government servants, all of them being placed in a prosperous position in life, have provided for themselves much more higher standard of living and better houses to live in. Building regulations and by-laws are enforced in all the municipalities and provisions are laid thereunder for the various sanitary arrangements. An organised conservancy service exists in most of the municipal towns and piped water-supply is also available in some of the bigger towns, namely, Gaya, Patna, Bhagalpur, Muzaffarpur, Moyghyr, Arrah and Daltonganj. A reconstruction scheme under improvement trust constituted under semi-Government agency was put to operation for the towns of Darbhanga and Monghyr after the earthquake. This scheme provided for the road widening, relaying of the houses and provision of markets and open spaces but it did not lay down fixed conditions with regard to the exact plans or designing of the houses. These were left to the owners themselves. No marked progress was however made during the year under review in extending the operations of the scheme. As regards the housing conditions in the factory and mining settlement areas, by far the majority of the labourers are employed as day labourers. They are mostly drawn from the neighbouring villages and live in their own huts. An arrangement in recent year has been made by most of the factory owners to provide housing accommodations for such labourers and workers as do not return to their own houses at night. The Rohtas Sugar Factory employes 969 labourers and of these 200 live in one-room huts with brick walls and corrugated iron sheet roofs provided by the factory management whilst the Dumraon Sugar Factory, Buxar Sugar Factory and Gaya Sugar Mills employ 400, 300 and 800 labourers and of these 125, 40 and 80, respectively, live in one-room huts of corrugated iron sheets provided by the factory owners. Eighty quarters for the assistants and ten bungalows for officers have also been provided by the management of the Rohtas Factory. Comprehensive housing provisions have also been made by the Tata Iron and Steel Company at Jamshedpur for its own employees. The majority of the labourers who reside in the factory at Jamshedpur live in the huts of approved designs either provided by the company or constructed by themselves with the aid of the subsides or easy term loans advanced by the Company. The minimum accommodation of a quarter has been fixed to two rooms with a kitchen, bathing place, latrine, verandah, courtyard and space for cowshed. Pipe water-supply is made available and drains and sewers are also provided. Considerable progress was also made during the year in providing a well laid out sanitary bustee or colony for the sweepers employed in the Company with the help of a special allotment of Rs. 66,000 for the purpose. A very ambitious scheme for the provision of housing accommodation at the Kadma and Dhaktidih areas in the Burma Mines and the northern town at an estimated cost of Rs. 8,12,300 was also put into operation during the year.

The Jharia Mines Board of Health requires "Standard Houses" to be provided by the colliery owners in accordance with specifications laid down in the housing by-laws framed under the Bihar and Orissa Mining Settlement Act. The standard houses are licensed for the accommodation of the labourers employed in the Board's areas on being certified by the board's medical officer of health after a personal inspection. Since April 1935, the board has embarked on a five years' programme in respect of the non-standard houses situated with the colliery areas, and they are being remodelled to standard specifications or demolished at the rate of 20 per cent annually till by the 1st April 1940, it is expected that there will be no non-standard houses in the Jharia Colliery areas. 28,938 standard houses were given license during the year 1937.

6. *Notification of infectious diseases.*—The Bihar and Orissa Municipal Act, 1935, providing for the compulsory notification of cases suffering from cholera, small-pox, plague and tuberculosis although came into force in all the municipal areas of the province, from 1st July 1935, it was found in 1937 that in actual practice full effect was not being given to its provisions and only a small proportion of the cases, specially of tuberculosis, was ever notified to the municipal areas.

The attention of the Assistant Directors of Public Health and the municipal health officers was, therefore, again drawn to the importance of early notification of these cases and it is expected that with fuller application of the provisions of the Act, the municipal health staff will be in a position to undertake preventive measures as soon as a case is reported and thus check the further spread of the disease with greater celerity.

7. *Personal proceedings and office.*—During the year under report the office of the Director of Public Health was held by Lieutenant-Colonel J. A. S. Phillips, C.I.E., I.M.S., from the 1st January to the 14th February 1937 and Lieutenant-Colonel S. L. Mitra, I.M.S., from the 15th February to the end of the year. Of the Assistant Directors of Public Health, Rai Bahadur Dr. B. P. Mozoomdar was in charge of the Chota Nagpur Circle throughout the year. While Rai Sahib Dr. A. N. Chatterji remained in charge of the North Bihar Circle from the 1st January to 14th August and again from the 20th October to 31st December 1937, and Dr. B. N. Sinha held charge of this circle during the remaining period of the year i. e. from 1st August to 19th October 1937. Lieutenant-Colonel S. L. Mitra, I.M.S., was in charge of the South Bihar Circle from the 1st January to 14th February while Dr. S. M. Rahman remained in charge of this circle from the 16th February to the end of the year.

8. *Touring.*—During the year the Director of Public Health was on tour for 48 days and the Assistant Directors of Public Health, South Bihar, North Bihar and Chota Nagpur Circles, for 153, 159 and 133 days, respectively.

9. *Personnel.*—In conclusion, I would like to bring to the notice of Government the good work done by the Assistant Directors of Public Health and my Personal Assistant. Rai Bahadur Dr. B. P. Mozoomdar, Rai Sahib Dr. A. N. Chattarji and Dr. S. M. Rahman have given further proofs of their excellent and reliable work as Assistant Directors of Public Health. The work of Drs. Badrinarayan Singh, D. B. Mookharji and K. Mitra has been commendable. Dr. S. K. Chattarji's work and Dr. C. N. Banarji's work as Superintendent of Vaccine Depot have been quite satisfactory.

S. L. MITRA,

Lt.-Col., I.M.S.,

Director of Public Health, Bihar.

ANNUAL VACCINATION REPORT

OF THE

Province of Bihar for the year 1937-38.

1. The statistics in the Vaccination Report are for the financial year while the statistics in the Annual Public Health Report are for the calendar year. The arrangement facilitates the inclusion of the figures for the complete vaccination season from October to March in the Vaccination Report.

2. *Staff.*—Lieutenant-Colonel S. L. Mitra, I.M.S., held charge of the office of the Director of Public Health throughout the year.

The whole province is divided into three circles for the purpose of Public Health Administration, namely, South Bihar, North Bihar and Chota Nagpur. Each is under the charge of an officer of the rank of the Assistant Director of Public Health. Rai Bahadur Dr. B. P. Mozoomdar was in charge of the Chota Nagpur Circle throughout the year. Dr. S. M. Rahman was in charge of the South Bihar Circle throughout the year. Rai Sahib Dr. A. N. Chatterji was in charge of the North Bihar Circle from 1st April to 14th August 1937 and from 20th October 1937 to 31st March 1938 and Dr. B. N. Sinha from 15th August 1937 to 19th October 1937.

The provincial vaccination inspecting staff consisted of nine district inspectors and 20 sub-inspectors of vaccination. The total number of vaccinators employed during the year was 1,184 of whom 83 were employed in towns and 1,101 in rural areas. Vaccination is performed by paid vaccinators in the municipal areas while licensed vaccinators are generally employed to perform vaccination operations in the rural areas. Each district has been divided into suitable small areas (elakas) and a licensed vaccinator who also has an apprentice with him is permitted to carry out vaccination within his area or elaka. The licensed vaccinator is allowed to charge a fee of annas two to four for each vaccination operation performed in the houses. There are also free vaccination depots in areas when the vaccination Act has been introduced and these are attended by the vaccinators on fixed days in a week and no fee is charged for carrying out vaccination at these depots. Besides these licensed vaccinators, paid vaccinators are also employed by the local bodies for short periods to deal with outbreaks of small-pox. Over and above these, Government provide for the temporary appointment of one hundred paid vaccinators every year and the Director of Public Health sanctions the appointment of these vaccinators by the local bodies or the Civil Surgeons for such periods as are considered necessary for combating epidemics.

3. *Operation performed.*—1,369,749 vaccination operations were performed during the year as against 1,586,143 during the previous year. This shows a decrease of 216,394 in the number of operations as compared with the figure for 1936-37.

There was an increase of 7,045 in the number of primary operations and a decrease of 223,439 in the number of re-vaccinations done during the year under report. Of the total operations performed 79·60 per cent were successful as against 72·52 in the previous year.

1,329,048 operations were performed by the vaccination staff as against 1,550,949 done in the preceding year. Of these 987,853 were primary and 341,195 re-vaccinations as against 980,315 primary and 570,634 re-vaccination in the preceding year. Although vaccination is generally recognised as the only preventive measure against small-pox, it has not yet become as popular as it should be with the masses in the province. When small-pox breaks out in an epidemic form, the people show some degree of willingness to get their children vaccinated, but when the epidemic is absent the incentive is much less and the number of vaccinations performed also falls. This is illustrated by the fact that during 1926-27 when the disease broke out in an

epidemic form, a greater number of vaccinations was recorded, but the number of operations fell during 1928-29 when fewer cases of small-pox occurred. Again during 1932-33 when an epidemic of small-pox prevailed in the province, the number of vaccinations increased by 368,090 operations over those performed in the preceding year while during the year 1934-35 which happened to be a milder year for small-pox, the total number of vaccination operations appear to have been proportionately less and in the year 1935-36, 164,049 more operations were performed than the preceding year. During 1936-37 and 1937-38, a total of 1,586,143 and 1,369,749 operations respectively were performed which shows a decrease as compared to those done in 1935-36. This was due to lower incidence of small-pox in the province during these two years. Vaccination operations generally are more in demand during the years when the disease breaks out in severe epidemic form.

4. *Vaccination in municipalities.*—The number of operations performed in municipalities decreased by 39,347 as compared with last year's returns. The total number of operations performed was 95,950 and the number of successful operation was 51,746 of which 35,565 were primary and 16,181 re-vaccinations, as against 37,891 and 21,935 respectively in the previous year. The ratios of success in municipalities were 93·54 per cent for primary operations and 47·93 per cent for re-vaccinations as compared with 91·43 per cent and 23·37 per cent respectively of last year.

5. *Vaccination in districts.*—The number of operations performed in rural areas was 1,233,098 as compared with 1,415,652 in the preceding years and the ratios of success were 97·57 per cent for primary operations and 33·82 per cent for re-vaccination.

The district of Patna reported an increase of 4,142 and the districts of Gaya and Shahabad reported decreases of 419 and 8,885 respectively. The districts of Muzaffarpur, Darbhanga and Saran recorded decrease of 23,944, 14,029 and 2,404 respectively while Champaran recorded an increase of 9,753 In all these districts vaccination is controlled by the health officers of the district boards.

The districts of Bhagalpur, Monghyr, Santal Parganas and Purnea recorded decreases of 36,004, 13,421, 12,838 and 54,822 in the number of vaccination operations performed in these districts respectively. Vaccination in the rural areas of the districts of Bhagalpur and Purnea is controlled by the health officers of the district boards, but the Civil Surgeons still function as Superintendents of Vaccination in the districts of Monghyr and Santal Parganas.

The district of Palamau recorded an increase of 18,396 while the districts of Hazaribagh, Manbhum and Singhbhum recorded decreases of 7,023, 10,531 33,479 and 30,886 respectively. The Civil Surgeons still continue to be the Superintendents of Vaccination in these districts of Ranchi, Hazaribagh, Singhbhum and Palamau because Health Organization Scheme has not yet been introduced in these districts. Vaccination in the rural areas of the district of Manbhum is controlled by the health officer of the district board.

6. *Vaccination in towns and compulsory areas.*—Statement V shows that during the year 14,773 children under one year of age out of an available number of 23,882 or 61·85 per cent were successfully vaccinated.

The towns of Dinapur, Barh, Khagaul, Jagdishpur, Bettiah, Muzaffarpur, Sitamarhi, Hajipur, Lalganj, Madhubani, Jamalpur and Dhanbad show the smallest proportion of vaccination work done.

7. *Protection of infants.*—During the year under report the number of children under one year available for vaccination was 985,682 and the number of successful operations was 273,292 or 277 per thousand as against 273,466 or 278 per thousand successful operations out of 983,017 available children during the previous year. The protection of infants in municipalities is separately shown in statement V. It gives a ratio of successful vaccination 618 per thousand of the surviving infant population as compared with 661 per thousand in the previous year.

These figures still ramain unsatisfactory inasmuch as they show that nearly three-fourths of the total number of infants under one year were left unvaccinated in the rural areas and a little less than two-fifths in the municipal areas. This is attributed to the common prejudice of the people against vaccination at an early age. Though primary vaccination has been made compulsory in the majority of the districts and all municipal towns in the province, vaccination of the infants and children is avoided by many people. There are obvious advantages in retaining the present age limit to one year for compulsory primary vaccination. No untoward complication occurs after early vaccination and the people should be educated in the benefit of early vaccination because the sooner an unprotected child is vaccinated, the quicker it acquires protection against the disease and ceases to remain a source of danger to the community.

8. *Incidence and mortality of small-pox.*—The total number of deaths that occurred from small-pox in the province during the last ten years was 138,431.

During the first five years the number of deaths was 46,541 while during the next five years 91,890. In each of the last five years the mortality was as follows :—

28,747, 16,871, 21,179, 18,216 and 6,877. The provincial ratios of the mortality from small-pox per thousand population during the last five years have been 0·89, 0·52, 0·65, 0·56 and 0·21. There was a decrease in the incidence of small-pox in the province in 1927-28. In 1928-29 there was a further reduction and in 1929-30 there was a still further reduction in the number of cases. In 1930-31, there was a small increase over the figure of 1929-30. In 1931-32 there was a further increase over the figure of 1930-31. In 1932-33 there was still further increase and in 1933-34 there was recorded a great increase over the figure of 1932-33, in 1934-35 the mortality figure fell down considerably. In 1935-36 the figure was slightly more than the preceding year. In 1936-37 the figure was less than the figure of 1935-36. In the year under report, the mortality figure fell down considerably.

9. *Prevention of small-pox.*—The proportion of vaccinated persons in the province still remains far below the figure necessary to prevent epidemic outbreaks and although the total annual vaccination operations amount approximately to two millions or so, these are quite insufficient to ensure the immunity of the total population against small-pox. Hence the incidence of this fell disease continues to remain high. This state of affairs is not so much due to insufficiency or inefficiency of the existing arrangement for vaccination in the province, but is chiefly due to the inherent apathy of the public towards this simple and efficient method of protection. Small-pox is a preventable disease and vaccination can prevent it. In the light of this knowledge and in face of the unsatisfactory vaccination state of the people there is a great necessity for a more vigorous and complete vaccination policy. Primary vaccination has been made compulsory for many years in all municipal towns, but all the provisions of the Act do not appear to be rigidly enforced with the result that a great proportion of the children do not get vaccination until they cross the first year of their lives. Besides, a large number of unvaccinated persons are to be found in every municipal town.

The incidence of small-pox can be definitely prevented provided repeated vaccinations are practised, but re-vaccinations are always accepted with reluctance and the people do not seem to realise that immunity conferred by primary vaccination wears out within 5 to 7 years. Thus during epidemics the percentage of protected persons is small and not until the diseases has had its toll that the public realise the importance of re-vaccination. Vaccination operations are easily done and generally cause no complications. No case of encephalitis following vaccination has so far been recorded in this province.

All the district boards which have health organisation schemes, have now assumed the responsibility of the control of vaccination in the rural areas and the cost of running the vaccination schemes is insignificant.

The Bengal Vaccination Act is enforced in the districts of Patna, Gaya, Shahabad, Hazaribagh, Muzaffarpur, Darbhanga, Saran, Purnea, Champaran and Bhagalpur and arrangements are being made to extend it to the district of Manbhum. Introduction of the Act in all the remaining districts of the province and definite arrangement for re-vaccination are necessary.

10. *Inspection of work.*—During the year under report the Assistant Directors of Public Health inspected 36,878 vaccinations (22,121 primary and 14,757 re-vaccinations) as against 44,619 in the previous year.

The Assistant Directors of Public Health performed vaccination inspection tours of 15 districts as compared with 14 in the previous year. Valuable reports were submitted on the work done in each of these districts.

11. The Superintendents of Vaccination of the province inspected 41,145 primary and 5,227 re-vaccinations against 43,300 primary and 13,739 re-vaccinations last year. The Vaccine Depot, Namkum, continued to supply the province with vaccine lymph throughout the year. A large supply of vaccine lymph is held in reserve and ample stock of the necessary stores and supplies for the manufacture is maintained. 2,933,190 doses of vaccine lymph were manufactured during the year as compared with 3,353,686 doses last year. 3,048,908 doses were issued as against 3,212,580 in the previous year and 4,775,327 doses were left in stock at the end of the year. The number of calves used for the manufacture of lymph during the year was 978 as compared with 1,118 in the previous year. The average yield of crude pulp per calf was 33,595 grammes. The total expenditure of the Vaccine Depot amounted to Rs. 34,913 during the year as compared with the expenditure of Rs. 37,185 of the previous year. The average cost of the vaccine lymph per dose came to 2·10 pies when calculated on the gross expenditure. The sale proceeds of vaccine lymph was Rs. 21,963 as compared with Rs. 27,769 of the previous year.

12. *Vaccine Depot and Cold Storage.* There was no serious outbreak of any epidemic disease among the calves. Only a few had a mild attack of foot and mouth disease but the outbreak was promptly checked. Only fourteen calves died after admission into the Vaccine Depot, the death rate being 1·44 per cent during the year as compared with 0·8 per cent of the previous year. Besides vaccine lymph, cholera, plague and influenza vaccines were also as usual stocked at the depot.

13. *Experimental work.*—The following is a summary of the experiments carried out by the Superintendent during the year:—

(1) In the seed regeneration cycle it was found that the rabbit pulp used for vaccination of the buffalo calf should be as fresh as possible and that the paste from the crude pulp from a rabbit should be made immediately after scraping and applied on the buffalo calf.

(2) The dilution test for potency of lymph was introduced and all samples are being tested on calves at a dilution of 1 in 1,500 before issue.

(3) The experiment of mixing 1 per cent carbolic acid solution in vaccine lymph is not suitable as it deteriorates the vaccine lymph sooner in the outside temperature.

(4) Crude pulp if preserved in the cold storage in crude form for about a year retains its potency fully and can be used. Whether the vaccine so prepared from it will keep full potency in the outside temperature or not is being investigated.

14. *Cost of the Department.*—The total cost of the Vaccination Department excluding that of the Vaccine Depot during the year, as noted in Statement I, was Rs. 50,673 as against Rs. 59,081 in the previous year.

The cost per each successful operation was nine pies as compared with ten pies of the last year.

15. Dr. C. N. Banerjee, the Superintendent of the Vaccine Depot, was deputed to the King Institute, Guindy, Madras, to study the working of the Lymph Department from the 15th November to 2nd December 1937. Since his return he has introduced better methods of mixing the lymph and filling it in the collapsible tubes. Other improvements will be possible to be effected after the electrical installation of the depot has been completed.

16. *Personnel.*—In conclusion, I desire to bring to the notice of Government the good work done by the Assistant Directors of Public Health in their respective circles.

Dr. B. P. Mozoomdar was in supervising and controlling charge of the Vaccine Depot in addition to his own duties whilst Dr. C. N. Banerjee continued as Superintendent of the Depot. Both the officers showed great keenness and interest in all matters connected with the depot.

S. L. MITRA, LT.-COL., I.M.S.,

Director of Public Health, Bihar.

A[illegible]X I.

Annual Form No. 1.—Births registered [illegible]tricts of Bihar Province during the year 1937.

2	3			4			5			6	7	8	9			10
Districts.	Population according to the Census of 1931.			Number of Births registered.			Ratio of births per 1,000 of population.			Number of males born to every 100 females born.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of population.	Mean ratio of births per 1,000 during previous five years.			No.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.				Male.	Female.	Total.	
PATNA DIVISION.																
Patna	956,124	890,350	1,846,474	34,188	33,183	[illegible]	18·5	17·9	36·4	...	...	...	17·4	16·7	34·1	1
Gaya	1,193,643	1,194,819	2,388,462	56,672	54,022	[illegible]	23·7	22·6	46·3	...	...	...	22·7	22·0	44·7	2
Shahabad	999,099	994,390	1,993,489	43,000	39,959	[illegible]	22·0	20·0	42·0	...	...	...	20·8	19·1	40·0	3
Total ...	3,148,866	3,079,559	6,228,425	133,860	127,164	[illegible]	21·5	20·4	41·9	...	...	...	20·5	19·5	40·0	
TIRHUT DIVISION.																
Saran	1,220,049	1,266,419	2,486,468	47,860	45,764	[illegible]	19·2	18·4	37·6	...	...	...	18·8	17·7	36·5	4
Champaran	1,080,956	1,064,731	2,145,687	36,380	34,571	[illegible]	16·9	16·1	33·0	...	...	...	17·4	16·6	34·0	5
Muzaffarpur	1,443,847	1,497,178	2,941,025	49,616	47,360	[illegible]	16·9	16·1	33·0	...	...	...	18·4	17·4	35·8	6
Darbhanga	1,570,959	1,595,135	3,166,094	50,786	47,902	[illegible]	16·0	15·1	31·1	...	...	...	16·4	15·5	31·9	7
Total ...	5,315,811	5,423,463	10,739,274	184,642	175,597	[illegible]	17·2	16·3	33·5	..	...	...	17·7	16·7	34·4	
BHAGALPUR DIVISION.																
Monghyr	1,145,797	1,141,357	2,287,154	43,080	41,207	[illegible]	18·8	18·0	36·8	..	...	...	19·6	18·3	37·9	8
Bhagalpur	1,130,584	1,104,048	2,234,632	34,377	33,091	[illegible]	15·4	14·8	30·2	...	...	...	16·2	15·4	31·6	9
Purnea	1,129,681	1,056,862	2,186,543	30,928	28,319	[illegible]	14·[illegible]	13·0	27·1	...	...	...	15·7	14·3	30·0	10
Santal Parganas	1,025,921	1,025,551	2,051,472	28,476	27,116	[illegible]	13·9	13·2	27·1	...	...	...	14·3	13·5	27·8	11
Total ...	4,431,983	4,327,818	8,759,801	136,861	129,733	[illegible]	15·6	14·8	30·4	...	...	...	16·5	15·4	31·9	
CHOTA NAGPUR DIVISION.																
Hazaribagh	7[illegible]1,956	765,401	1,517,357	28,045	27,207	[illegible]	18·5	17·9	36·4	...	...	...	17·9	17·3	35·3	12
Ranchi	777,063	790,086	1,567,149	25,057	24,347	[illegible]	15·9	15·6	31·5	...	...	...	16·0	15·7	31·7	13
Palamau	409,778	408,958	818,736	17,041	16,437	[illegible]	20·8	20·1	40·9	...	...	...	21·4	20·9	42·3	14
Manbhum	940,009	870,881	1,810,890	26,575	24,730	[illegible]	14·7	13·6	28·3	...	...	...	14·7	14·0	28·7	15
Singhbhum	469,421	460,381	929,802	12,162	11,199	[illegible]	14·9	13·7	28·6	...	...	...	13·0	12·4	25·4	16
Total ...	3,348,227	3,295,707	6,643,934	108,880	103,920	[illegible]	16·4	15·6	32·0	...	...	...	16·3	15·8	32·1	
Total for the Province ...	16,244,887	16,126,547	32,371,434	564,243	536,414	[illegible]	17·4	16·6	34·0	105	11·5	...	17·6	16·7	34·4	

APPENDIX I—*contd.*

Annual Form No. IA.—Births registered according to class in each town and rural areas in the districts of Bihar province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other Classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
PATNA.																		
Patna town	...	...	...	963	880	1,843	268	257	525	...	...	...	...	1	1	1,231	1,138	2,369
Bihar town	...	...	...	289	293	582	79	77	156	...	...	...	...	...	...	368	370	738
Dinapur Nizamat town	...	...	...	181	201	382	48	39	87	...	...	...	...	...	...	229	240	469
Dinapur Cantonment	2	2	4	100	92	19[illegible]	24	28	52	...	...	...	...	1	1	126	123	249
Barh town	...	...	...	97	96	193	26	25	51	...	...	...	...	...	...	123	121	244
Khagole town	...	...	...	76	62	138	16	9	25	...	...	...	...	...	...	92	71	163
Total of towns	2	2	4	1,706	1,624	3,3[illegible]0	461	435	896	...	...	...	...	2	2	2,169	2,063	4,232
Total of rural	...	...	...	30,053	29,113	59,1[illegible]	1,966	2,007	3,973	...	...	...	...	...	...	32,019	31,120	63,139
Total of district	2	2	4	31,759	30,737	62,4[illegible]	2,427	2,442	4,869	...	...	...	...	2	2	34,188	33,183	67,371
GAYA.																		
Gaya town	...	...	...	1,099	1,000	2,0[illegible]	272	251	523	...	...	...	...	...	...	1,371	1,251	2,622
Tikari town	...	...	...	95	101	19[illegible]	29	21	50	...	...	...	...	...	...	124	122	246
Daudnagar town	...	...	...	198	184	38[illegible]	38	42	80	...	...	...	...	...	...	236	226	462
Total of towns	...	...	...	1,392	1,285	2,67[illegible]	339	314	653	...	...	...	...	...	...	1,731	1,599	3,330
Total of rural	...	...	...	49,941	47,942	97,8[illegible]	5,000	4,481	9,481	...	...	...	...	...	...	54,941	52,423	107,364
Total of district	...	...	...	51,333	49,227	100,5[illegible]	5,339	4,795	10,134	...	...	...	...	...	...	56,672	54,022	110,694
SHAHABAD.																		
Arrah town	1	...	1	211	163	3[illegible]	70	51	121	...	...	...	...	...	...	284	214	496
Buxar town	...	...	...	133	137	2[illegible]	37	33	70	...	...	...	...	...	...	170	170	340
Dumraon town	...	...	...	120	89	2[illegible]	15	20	35	...	...	...	...	...	...	135	109	244
Jagadispur town	...	...	...	61	51	1[illegible]	29	21	50	...	...	...	...	...	...	90	72	162
Sasaram town	...	...	...	216	194	4[illegible]	63	70	133	...	...	...	...	...	...	279	264	543
Bhabua town	...	...	...	50	34	[illegible]	24	12	36	...	...	...	...	...	...	74	46	120
Total of towns	1	...	1	791	668	1,[illegible]	238	207	145	...	...	...	...	...	...	1,030	875	1,905
Total of rural	...	1	1	39,744	37,047	76,[illegible]	2,226	2,036	4,262	...	...	...	...	...	...	41,970	39,084	81,054
Total of district	1	1	2	40,535	37,715	78,[illegible]	2,464	2,243	4,707	...	...	...	...	...	...	43,000	39,959	82,959

APPENDIX I—*contd.*

Annual Form No. IA.—Births registered according to class in each town and rural areas in the districts of Bihar province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other Classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
SARAN.																		
hapra town	...	...	...	586	515	1,101	174	137	311	...	...	...	...	...	...	760	652	1,412
evelganj town	...	...	...	135	106	241	36	43	79	...	...	...	...	...	...	171	149	320
wan town	...	...	...	180	158	338	68	62	120	...	...	...	...	...	...	248	230	468
Total of towns ...	...	...	...	901	779	1,680	278	242	520	...	...	...	...	...	...	1,179	1,021	2,200
Total of rural ...	...	...	...	39,174	37,796	76,970	7,507	6,947	14,454	..	...	...	...	...	...	46,681	44,743	91,424
Total of district ...	...	...	...	40,075	38,575	78,650	7,785	7,189	14,974	...	...	...	...	...	...	47,860	45,764	93,624
CHAMPARAN.																		
tiah town	49	58	107	342	298	640	171	145	316	...	...	...	...	...	...	562	501	1,063
otihari town	...	...	...	105	104	209	63	60	123	...	...	..	...	...	...	168	164	332
Total of towns	49	58	107	447	402	849	234	205	439	...	...	...	...	...	...	730	665	1,395
Total of rural	7	10	17	30,647	28,792	59,439	4,996	5,104	10,100	...	...	...	...	...	...	35,650	33,906	69,556
Total of district	56	68	124	31,094	29,194	60,288	5,230	5,309	10,539	...	...	...	...	...	...	36,380	34,571	70,951
MUZAFFARPUR.																		
Muzaffarpur town	2	1	3	352	323	675	153	144	297	...	...	...	...	...	...	507	468	975
Sitamarhi town	...	...	...	108	112	220	30	22	52	...	...	...	...	...	...	138	134	272
Hajipur town	...	...	...	306	264	570	63	49	112	...	...	...	...	...	...	369	313	682
Lalganj town	...	...	...	114	144	258	35	21	56	...	...	...	...	...	...	149	165	314
Total of towns	2	1	3	880	843	1,723	281	236	517	...	...	...	...	...	...	1,163	1,080	2,243
Total of rural	6	7	13	42,882	40,631	83,513	5,565	5,612	11,207	...	...	...	...	...	...	48,453	46,280	94,733
Total of district	8	8	16	43,762	41,474	85,236	5,846	5,878	11,724	...	...	...	...	...	...	49,616	47,360	96,976
DARBHANGA.																		
Darbhanga town	...	...	...	674	604	1,278	288	260	548	...	...	...	...	...	...	962	864	1,826
Roserah town	...	...	...	139	85	224	29	10	39	...	...	...	...	...	...	168	95	263
Samastipur town	...	...	...	126	118	244	18	12	30	...	...	...	...	...	..	144	130	274
Madhubani town	...	...	...	171	146	317	105	65	170	...	...	...	...	...	...	276	211	487
Total of towns	...	...	...	1,110	953	2,063	410	377	787	...	...	...	...	...	...	1,550	1,300	2,850
Total of rural	...	..	...	43,181	40,841	84,022	6,055	5,761	11,816	...	...	...	...	...	...	49,236	46,602	95,838
Total of district	...	...	...	44,291	41,794	86,085	6,495	6,108	12,603	...	...	...	...	...	...	50,786	47,902	98,688

APPENDIX 1—*contd.*

Annual Form No. IA.—Births registered according to class in each town and rural area in the districts of Bihar province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other Classes.			Total.		
—	Male.	Female.	Total.	Male	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
MONGHYR.																		
Monghyr town	1	...	1	648	518	[illegible]	134	133	267	...	...	...	...	...	...	783	651	1,434
Jamalpur town	4	...	4	424	495	[illegible]	90	66	156	...	...	...	...	...	...	518	561	1,079
Total of towns	5	...	5	1,072	1,013	[illegible]	224	199	423	...	...	...	...	...	...	1,301	1,212	2,513
Total of rural	4	1	5	38,073	36,459	[illegible]	3,702	3,535	7,237	...	...	...	...	...	...	41,779	39,995	81,774
Total of district	9	1	10	39,145	37,472	[illegible]	3,926	3,734	7,660	...	...	...	...	...	...	43,080	41,207	84,287
BHAGALPUR.																		
Bhagalpur town	...	...	...	697	673	[illegible]	138	126	264	...	...	...	...	...	...	835	799	1,634
Colgong town	...	...	...	73	46	[illegible]	15	11	26	...	...	...	...	...	...	88	57	145
Total of towns	...	...	...	770	719	[illegible]	163	137	290	...	...	...	...	...	...	923	856	1,779
Total of rural	...	...	...	29,721	29,141	[illegible]	3,733	3,094	6,827	...	...	...	...	...	...	33,454	32,235	65,689
Total of district	...	...	...	30,491	29,860	[illegible]	3,886	3,231	7,117	...	...	...	...	...	...	34,377	33,091	67,468
PURNEA.																		
Purnea town	...	...	...	66	55	[illegible]	47	41	88	...	...	...	...	...	...	113	96	209
Kishenganj town	...	...	...	37	36	[illegible]	37	29	66	...	...	...	...	...	...	74	65	139
Katihar town	...	...	...	67	48	[illegible]	16	10	26	...	...	...	...	...	...	83	58	141
Forbesganj town	...	...	...	49	47	[illegible]	32	14	46	...	...	...	...	...	...	81	61	142
Total of towns	...	...	...	219	186	[illegible]	132	94	226	...	...	...	...	...	...	351	280	631
Total of rural	...	...	...	18,365	16,796	[illegible]	12,212	11,243	23,456	...	...	...	...	...	...	30,577	28,039	58,616
Total of district	...	...	...	18,584	16,982	[illegible]	12,344	11,337	23,681	...	...	...	...	...	...	30,928	28,319	59,247
SANTAL PARGANAS.																		
Sahibganj town	...	...	...	68	44	[illegible]	16	18	34	...	...	...	...	...	...	84	62	146
Deoghar town	...	...	...	49	37	[illegible]	12	2	14	...	...	...	...	...	...	61	39	100
Dumka town	...	...	...	34	24	[illegible]	5	8	13	...	...	...	...	...	...	39	32	71
Madhupur town	1	...	1	46	39	[illegible]	10	3	13	...	...	...	...	1	1	57	43	100
Total of towns	1	...	1	197	144	[illegible]	43	31	74	...	...	...	...	1	1	241	176	417
Total of rural	48	39	87	13,579	12,968	[illegible]	3,524	3,242	6,766	...	...	...	11,084	10,691	21,775	28,235	26,940	55,175
Total of district	49	39	88	13,776	13,112	[illegible]	3,567	3,273	6,840	...	...	...	11,084	10,692	21,776	28,476	27,116	55,592

APPENDIX I—*contd.*

Annual Form No. IA.—Births registered according to class in each town and rural areas in the districts of Bihar province during the year 1937—concld.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
HAZARIBAGH.																		
Hazaribagh town ...	...	...	...	150	143	293	35	25	60	...	...	...	...	...	...	185	168	353
Chatra town ...	...	...	...	89	115	204	49	40	89	...	...	..	...	...	...	138	155	293
Giridih town ...	...	...	...	92	94	186	55	29	84	..	...	...	...	...	...	147	123	270
Total of towns ...	...	...	...	331	352	683	139	94	233	...	...	...	...	...	...	470	446	916
Total of rural ...	10	6	16	25,363	24,686	50,049	1,950	1,842	3,792	...	..	...	252	227	479	27,576	26,761	54,336
Total ot district ...	10	6	16	25,694	25,038	50,732	2,089	1,936	4,025	...	..	...	252	227	479	28,045	27,207	55,252
RANCHI.																		
Ranchi town ...	51	35	86	256	238	494	88	82	170	...	...	...	1	...	1	396	355	751
Lohardaga town ...	2	3	5	59	51	110	44	28	72	...	...	...	8	3	11	113	85	198
Total of towns ...	53	38	91	315	289	604	132	110	242	...	...	...	9	3	12	509	440	949
Total of rural ...	3,547	3,560	7,107	7,952	7,697	15,649	994	934	1,928	..	...	...	12,055	11,716	23,771	24,548	23,907	48,455
Total of district ...	3,600	3,598	7,198	8,267	7,986	16,253	1,126	1,044	2,170	..	...	...	12,064	11,719	23,783	25,057	24,347	49,404
PALAMAU.																		
Daltonganj town ...	...	...	...	81	85	166	22	21	43	...	...	...	...	...	...	103	106	209
Total of rural ...	163	120	283	15,272	14,795	30,067	1,503	1,416	2,919	...	...	..	...	...	...	16,938	16,331	33,269
Total of district ...	163	120	283	15,353	14,880	30,233	1,525	1,437	2,962	...	...	...	...	...	...	17,041	16,437	33,478
MANBHUM.																		
Purulia town ...	5	12	17	213	191	404	30	21	51	...	...	...	...	...	...	248	224	472
Raghunathpur town ...	...	...	...	119	76	195	3	3	6	...	...	...	...	...	...	122	79	201
Jhalda town ...	3	5	8	81	61	142	4	...	4	...	...	...	...	...	...	88	66	154
Dhanbad town ...	4	1	5	170	238	408	49	42	91	...	...	...	6	2	8	229	283	512
Total of towns ...	12	18	30	583	566	1,149	86	66	152	...	...	...	6	2	8	687	652	1,339
Total of rural ...	27	18	45	22,798	21,437	44,235	1,386	1,178	2,564	...	...	...	1,677	1,445	3,122	25,888	24,078	49,966
Total of district ...	39	36	75	23,381	22,003	45,384	1,472	1,244	2,716	...	...	...	1,683	1,447	3,130	26,575	24,730	51,305
SINGHBHUM.																		
Chaibassa town ...	4	6	10	105	77	182	12	14	26	...	...	...	16	12	28	137	109	246
Chakradharpur town ...	5	2	7	61	62	123	8	4	12	...	...	...	1	3	4	75	71	146
Jugsalai town ...	...	...	...	95	74	169	30	11	41	...	...	...	5	...	5	130	85	215
Jamshedpur town ...	2	2	4	152	94	246	19	11	30	...	...	...	9	6	15	182	113	295
Total of towns ...	11	10	21	413	307	720	69	40	109	...	...	...	31	21	52	524	378	902
Total of rural ...	83	68	151	5,809	5,330	11,139	63	61	124	...	...	...	5,683	5,362	11,045	11,638	10,821	22,459
Total of districts ...	94	78	172	6,222	5,637	11,859	132	101	233	...	...	...	5,714	5,383	11,097	12,162	11,199	23,361
Province.																		
Total of towns ...	136	127	263	11,208	10,215	21,42[illegible]	3,271	2,778	6,019	...	...	...	48	27	75	14,661	13,149	27 810
Total of rural ...	3,895	3,830	7,725	452,554	431,471	884,02[illegible]	62,382	58,523	120,905	...	...	...	30,751	29,441	60,192	549,582	523,265	1,072,847
Total of districts ...	4,031	3,957	7,988	463,762	[illegible]	[illegible]	65,653	61,301	126,954		...	...	30,799	29,468	60,267	564,243	536,414	1,100,657

APPENDIX I—*contd.*

Annual Form no. IB.—Still births registered according to class in each town and rural areas in the districts of Bihar province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other Classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
PATNA.																		
Patna town	..	..	..	15	2	17	1	5	6	..	..	..	..	..	..	16	7	23
Bihar town . ..	..	..	..	3	..	3	1	..	1	..	..	..	..	..	..	4	..	4
Dinapur Nizamat town ..	..	..	..	8	3	11	1	..	1	..	..	..	..	..	..	9	3	12
Dinapur Cantonment ..	..	..	..	1	3	4	..	..	..	..	..	..	..	..	..	1	3	4
Barh town	..	..	..	4	4	8	..	..	..	..	..	..	..	..	..	4	4	8
Khagole town ..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	..	1	1	2
Total of towns ..	..	..	..	32	13	45	3	5	8	..	..	..	..	..	..	35	18	53
Total of rural ..	..	..	..	1,686	1,405	3,091	22	16	38	..	..	..	..	..	..	1,708	1,421	3,129
Total of district ..	..	..	..	1,718	1,418	3,136	25	21	46	..	..	..	..	..	..	1,743	1,439	3,182
GAYA.																		
Gaya town	..	..	..	71	79	150	10	15	25	..	..	..	..	..	..	81	94	175
Tikari town	..	..	..	7	6	13	..	..	..	..	..	..	..	..	..	7	6	13
Daudnagar town ..	..	..	..	6	4	10	..	..	..	..	..	..	..	..	..	6	4	10
Total of towns ..	..	..	..	84	89	173	10	15	25	..	..	..	..	..	..	94	104	198
Total of rural ..	..	..	..	1,466	1,158	2,624	72	60	132	..	..	..	..	..	..	1,538	1,218	2,756
Total of district ..	..	..	..	1,550	1,247	2,797	82	75	157	..	..	..	..	..	..	1,632	1,322	2,954
SHAHABAD.																		
Arrah town	..	..	..	1	3	4	..	1	1	..	..	..	..	..	..	1	4	5
Buxar town	..	..	..	1	1	2	..	1	1	..	..	..	..	..	..	1	2	3
Dumraon town ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jagadispur town ..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..
Sasaram town ..	..	..	..	..	..	..	3	..	3	..	..	..	..	..	..	4	1	5
Bhabua town	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of towns ..	..	..	..	3	5	8	3	2	5	..	..	..	..	..	..	6	7	13
Total of rural ..	..	..	..	11	19	30	4	6	10	..	..	..	..	..	..	15	25	40
Total of district ..	..	..	..	14	24	38	7	8	15	..	..	..	..	..	..	21	32	53

APPENDIX I—*contd.*

Annual Form no. IB.—Still births registered according to class in each town and rural areas in the districts of Bihar province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other Classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
SARAN.																		
Chapra town ..	..	..	..	23	16	39	..	..	..	..	..	..	..	..	..	23	16	39
Revelganj town ..	..	..	..	3	4	7	..	..	..	..	..	..	..	..	..	3	4	7
Siwan town ..	..	..	..	11	3	14	..	..	..	..	..	..	..	..	..	11	3	14
Total of towns ..	..	..	..	37	23	60	..	..	..	..	..	..	..	..	..	37	23	60
Total of rural ..	..	..	..	1,690	1,256	2,946	241	225	466	..	..	..	..	..	..	1,931	1,481	3,412
Total of district ..	..	..	..	1,727	1,279	3,006	241	225	466	..	..	..	..	..	..	1,968	1,504	3,472
CHAMPARAN.																		
Bettiah town ..	..	..	..	5	1	6	2	3	5	..	..	..	..	..	..	7	4	11
Motihari town ..	..	..	..	3	3	6	..	..	..	..	..	..	..	..	..	3	3	6
Total of towns ..	..	..	..	8	4	12	2	3	5	..	..	..	..	..	..	10	7	17
Total of rural ..	..	..	..	1,239	1,064	2,303	193	173	366	..	..	..	..	..	..	1,432	1,237	2,669
Total of district ..	..	..	..	1,247	1,068	2,315	195	176	371	..	..	..	..	..	..	1,442	1,244	2,686
MUZAFFARPUR.																		
Muzaffarpur town ..	..	..	..	11	13	24	6	3	9	..	..	..	..	..	..	17	16	33
Sitamarhi town ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hajipur town ..	..	..	..	7	6	13	2	..	2	..	..	..	..	..	..	9	6	15
Lalganj town ..	..	..	..	4	2	6	..	..	..	..	..	..	..	..	..	4	2	6
Total of towns ..	..	..	..	22	21	43	8	3	11	..	..	..	..	..	..	30	24	54
Total of rural ..	..	..	..	2,334	1,827	4,161	449	333	782	..	..	..	..	..	..	2,783	2,160	4,943
Total of district ..	..	..	..	2,356	1,848	4,204	457	336	793	..	..	..	..	..	..	2,813	2,184	4,997
DARBHANGA.																		
Darbhanga town ..	..	..	..	12	18	30	1	2	3	..	..	..	..	..	..	13	20	33
Roserah town ..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Samastipur town ..	..	..	..	2	2	4	..	..	..	..	..	..	..	..	..	2	2	4
Madhubani town ..	..	..	..	5	6	11	2	3	5	..	..	..	..	..	..	7	9	16
Total of towns ..	..	..	..	20	26	46	3	5	8	..	..	..	..	..	..	23	31	54
Total of rural ..	..	..	..	641	564	1,205	161	112	273	..	..	..	..	..	..	802	676	1,478
Total of district ..	..	..	..	661	590	1,251	164	117	281	..	..	..	..	..	..	825	707	1,532

APPENDIX I—*contd.*

Annual Form no. IB.—Still births registered according to class in each town and rural areas in the districts of Bihar province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other Classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
MONGHYR.																		
Monghyr town ..	..	..	..	8	5	13	..	..	..	..	..	..	..	..	..	8	5	13
Jamalpur town ..	..	..	..	3	3	6	..	..	..	..	..	..	..	..	..	3	3	6
Total of towns ..	..	..	..	11	8	19	..	..	..	..	..	..	..	..	..	11	8	19
Total of rural ..	..	..	..	1,427	1,243	2,670	490	405	895	..	..	..	..	..	..	1,917	1,648	3,565
Total of district ..	..	..	..	1,438	1,251	2,689	490	405	895	..	..	..	..	..	..	1,928	1,656	3,584
BHAGALPUR.																		
Bhagalpur town ..	..	..	..	23	10	33	..	..	..	..	..	..	..	..	..	23	10	33
Colgong town ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of towns ..	..	..	..	23	10	33	..	..	..	..	..	..	..	..	..	23	10	33
Total of rural ..	..	..	..	427	325	752	59	63	122	..	..	..	..	..	..	486	388	874
Total of district ..	..	..	..	450	335	785	59	63	122	..	..	..	..	..	..	509	398	907
PURNEA.																		
Purnea town ..	..	..	..	3	1	4	..	..	..	..	..	..	..	..	..	3	1	4
Kishenganj town ..	..	..	..	2	1	3	1	..	1	..	..	..	..	..	..	3	1	4
Katihar town ..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	2	2
Forbesganj town ..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	..	1
Total of towns ..	..	..	..	6	4	10	1	..	1	..	..	..	..	..	..	7	4	11
Total of rural ..	..	..	..	707	491	1,198	481	388	869	..	..	..	..	..	..	1,188	879	2,067
Total of district ..	..	..	..	713	495	1,208	482	388	870	..	..	..	..	..	..	1,195	883	2,078
SANTAL PARGANAS.																		
Sahibganj town ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Deoghar town ..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Dumka town ..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Madhupur town ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of towns ..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	..	1	1	2
Total of rural ..	..	..	..	94	41	135	17	18	35	..	..	..	46	49	95	157	108	265
Total of district ..	..	..	..	95	42	137	17	18	35	..	..	..	46	49	95	158	109	267
HAZARIBAGH.																		
Hazaribagh town ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chatra town ..	..	..	..	1	1	2	1	..	1	..	..	..	..	..	..	2	1	3
Giridih town ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of towns ..	..	..	..	1	1	2	1	..	1	..	..	..	..	..	..	2	1	3
Total of rural ..	..	..	..	445	305	750	29	29	58	..	..	..	2	..	2	476	334	810
Total of district ..	..	..	..	446	306	752	30	29	59	..	..	..	2	..	2	478	335	813

APPENDIX I—*contd.*

Annual Form no. IB.—Still births registered according to class in each town and rural areas in the districts of Bihar province during the year 1937—concld.

1	2			3		
Registering circle.	Christians.			Hindus.		
	Male.	Female.	Total.	Male.	Female.	Total.
RANCHI.						
Ranchi town	..	..	..	2	1	3
Lohardaga town ..	..	1	1	..	3	3
Total of towns ..	..	1	1	2	4	6
Total of rural ..	179	170	349	289	241	530
Total of district ..	179	171	350	291	245	536
PALAMAU.						
Daltonganj town ..	..	..	..	1	..	1
Total of rural ..	3	..	3	331	230	561
Total of district ..	3	..	3	332	230	562
MANBHUM.						
Purulia town ..	..	..	..	1	..	1
Raghunathpur town ..	..	..	..	..	..	..
Jhalda town	..	..	..	..	1	1
Dhanbad town ..	..	..	..	5	3	8
Total of towns ..	..	..	..	6	4	10
Total of rural ..	..	..	..	270	163	433
Total of district ..	..	..	..	276	167	443
SINGHBHUM.						
Chaibassa town ..	1	..	1	..	..	..
Chakradharpur town ..	..	..	..	10	2	12
Jugsalai town	..	..	..	..	..	..
Jamshedpur town ..	..	..	..	1	..	1
Total of towns ..	1	..	1	11	2	13
Total of rural ..	..	1	1	108	73	181
Total of districts ..	1	1	2	119	75	194
Province.						
Total of towns ..	1	1	2	268	215	483
Total of rural ..	182	171	353	13,165	10,405	23,570
Total of districts ..	183	172	355	13,433	10,620	24,053

1	4			5			6			7		
Registering circle.	Muhammadans.			Buddhists.			Other Classes.			Total.		
	Male.	Female.	Total	Male.	Female.	Total	Male.	Female.	Total	Male.	Female.	Total.
RANCHI.												
Ranchi town	..	..	..	..	..	..	1	3	4	3	4	7
Lohardaga town	..	1	1	..	..	..	1	2	3	1	7	8
Total of towns	..	1	1	..	..	..	2	5	7	4	11	15
Total of rural	70	35	105	..	..	..	333	295	628	871	741	1,612
Total of district	70	36	106	..	..	..	335	300	635	875	752	1,627
PALAMAU.												
Daltonganj town	..	..	..	..	..	..	..	..	..	1	..	1
Total of rural	25	17	42	..	..	..	..	..	..	359	247	606
Total of district	25	17	42	..	..	..	..	..	..	360	247	607
MANBHUM.												
Purulia town	..	1	1	..	..	..	..	..	..	1	1	2
Raghunathpur town	..	..	..	..	..	..	..	..	..	..	..	..
Jhalda town	..	..	..	..	..	..	..	..	..	..	1	1
Dhanbad town	..	..	..	..	..	..	..	..	..	5	3	8
Total of towns	..	1	1	..	..	..	..	..	..	6	5	11
Total of rural	5	5	10	..	..	..	5	..	5	280	168	448
Total of district	5	6	11	..	..	..	5	..	5	286	173	459
SINGHBHUM.												
Chaibassa town	..	..	..	..	..	..	..	..	..	1	..	1
Chakradharpur town	..	..	..	..	..	..	..	..	..	10	2	12
Jugsalai town	..	..	..	..	..	..	..	..	..	..	..	..
Jamshedpur town	..	..	..	..	..	..	..	..	..	1	..	1
Total of towns	..	..	..	..	..	..	..	..	..	12	2	14
Total of rural	2	1	3	..	..	..	116	79	195	226	154	380
Total of districts	2	1	3	..	..	..	116	79	195	238	156	394
Province.												
Total of towns	31	35	66	..	..	..	2	5	7	302	256	558
Total of rural	2,320	1 886	4.206	..	..	..	502	421	925	16,169	12,885	29,054
Total of districts	2,351	1,921	4,272	..	..	..	504	426	932	16,471	13,141	29,612

Annual Form No. II.—Statement of Deaths registered in the districts of Bihar Province, during the year 1937.

1	2	3	4	5			6
No.	District.	Area in square miles.	Average population per square mile.	Number of deaths registered. Male.	Female.	Total.	Number of deaths of males to every 100 deaths of females.
	PATNA DIVISION.						
1	Patna	2,068	893	21,194	20,405	41,599	...
2	Gaya	4,714	506	33,402	31,480	64,882	...
3	Shahabad	4,372	456	23,251	22,655	45,906	...
	Total	11,154	558	77,847	74,510	152,387	...
	TIRHUT DIVISION.						
4	Saran	2,083	927	26,318	23,224	49,542	...
5	Champaran	3,531	607	21,820	18,172	39,992	...
6	Muzaffarpur	3,036	968	35,658	31,649	67,307	...
7	Darbhanga	3,348	945	39,169	33,843	73,012	...
	Total	12,598	852	122,965	106,888	229,853	...
	BHAGALPUR DIVISION.						
8	Monghyr	3,927	582	26,152	24,404	50,556	...
9	Bhagalpur	4,226	528	32,120	28,785	60,905	...
10	Purnea	4,972	439	33,542	29,354	62,896	...
11	Santal Parganas	5,458	375	18,728	15,597	34,325	...
	Total	18,583	471	110,542	98,140	208,682	...
	CHOTA NAGPUR DIVISION.						
12	Hazaribagh	7,021	216	17,394	15,624	33,018	...
13	Ranchi	7,102	220	18,130	15,906	34,036	...
14	Palamau	4,916	166	12,492	11,405	23,897	...
15	Manbhum	4,095	442	17,784	13,953	31,737	...
16	Singhbhum	3,879	230	8,601	7,243	15,844	...
	Total	27,013	235	74,401	64,131	138,532	...
	Total for the Province	69,348	465	385,755	34[illegible],69[illegible]	729,454	1[illegible]

2	7											8			9
	Death-rate per 1,000 of population from—											Mean ratio of deaths per 1,000 during previous five years.			
District.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhœa.	Respiratory diseases.	Injuries.	All other causes.	All causes. Male.	Female.	Total.	Male.	Female.	Total.	No.
PATNA DIVISION.															
Patna	0	0·3	...	13·3	0·6	0·7	0·3	6·4	22·2	22·9	22·5	20·4	20·9	20·6	1
Gaya	0·6	0·4	...	20·1	0·1	0·07	0·3	5·5	28·0	26·3	27·1	28·0	26·1	27·1	2
Shahabad	0·1	0·4	0·0005	17·4	0·02	0·01	0·2	4·8	23·4	23·0	23·0	23·3	22·6	23·0	3
Total	0·5	0·4	0·0001	17·3	0·2	0·2	0·3	5·6	24·7	24·2	2[illegible]·5	24·2	23·5	23·9	
TIRHUT DIVISION.															
Saran	0·1	0·3	0·4	11·3	0·1	0·2	0·4	6·9	21·5	18·3	19·9	22·2	19·2	20·7	4
Champaran	0·01	0·2	0·02	15·4	0·01	0·01	0·2	2·8	20·2	17·1	18·6	22·8	20·1	22·5	5
Muzaffarpur	0·6	0·03	0·09	19·7	0·04	0·02	0·3	2·0	24·7	21·1	22·9	24·8	22·4	23·0	6
Darbhanga	0·5	0·08	0·01	20·2	0·1	0·02	0·4	1·7	24·9	21·2	23·0	22·4	19·9	21·1	7
Total	0·3	0·1	0·1	17·0	0·07	0·08	0·4	3·2	23·1	19·7	21·4	23·1	20·5	21·8	
BHAGALPUR DIVISION.															
Monghyr	1·0	0·2	...	16·4	0·04	0·02	0·2	4·1	22·8	21·4	22·1	24·4	22·6	23·5	8
Bhagalpur	1·2	0·2	0·0002	23·1	0·04	0·03	0·2	2·4	28·4	26·0	27·2	24·3	22·0	23·2	9
Purnea	0·1	0·1	...	27·0	0·04	0·02	0·2	1·2	29·7	27·8	28·8	25·0	23·4	24·2	10
Santal Parganas	0·6	0·3	...	14·3	0·04	0·1	0·1	1·2	18·2	15·2	16·7	20·4	17·6	19·0	11
Total	0·7	0·2	0·0006	20·3	0·05	0·05	0·2	2·3	24·9	22·1	23·8	23·6	21·4	22·5	
CHOTA NAGPUR DIVISION.															
Hazaribagh	0·2	0·05	...	18·4	0·06	0·03	0·2	2·6	23·1	20·4	21·7	22·5	20·0	21·2	12
Ranchi	0·03	0·03	...	17·7	0·7	0·04	0·2	3·0	23·3	20·1	21·7	23·9	20·7	22·3	13
Palamau	0·02	1·0	...	24·0	0·01	0·004	0·2	3·8	30·5	27·9	29·2	28·0	25·4	26·7	14
Manbhum	0·08	0·4	...	15·2	0·05	0·1	0·2	1·4	18·9	16·1	17·5	19·4	17·5	18·5	15
Singhbhum	0·2	0·2	...	16·9	0·1	0·02	0·2	1·7	21·4	17·5	19·4	16·8	14·3	15·4	16
Total	0·1	0·3	...	17·6	0·2	0·05	0·2	2·4	22·2	19·5	20·8	21·8	19·4	20·6	
Total for the Province	0·4	0·2	0·04	18·1	0·1	0·1	0·3	3·2	23·7	21·3	22·5	23·2	21·9	22·1	

APPENDIX I—*contd.*

Annual Form No. III.—Deaths registered in the districts of Bihar Province, during each month of the year 1937—contd.

1	2		3						4							5	6
No.	District.		Population according to census, 1931.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	No.
	PATNA DIVISION.																
1	Patna District ...	Urban ...	258,284	224	171	177	249	257	323	320	294	250	346	328	297	3,236	1
		Rural ...	1,588,190	2,057	1,965	2,188	2,868	2,771	4,014	3,964	3,659	3,813	3,802	3,798	3,464	38,363	
		Total ...	1,846,474	2,281	2,136	2,365	3,117	3,028	4,337	4,284	3,953	4,063	4,148	4,126	3,761	41,599	
2	Gaya District ...	Urban ...	105,185	192	173	223	243	248	311	310	414	396	342	350	315	3,517	2
		Rural ...	2,283,277	3,021	3,189	3,118	4,103	4,571	5,672	6,263	6,965	6,730	6,477	5,668	5,588	61,365	
		Total ...	2,388,462	3,213	3,362	3,341	4,346	4,819	5,983	6,573	7,379	7,126	6,819	6,018	5,903	64,882	
3	Shahabad District ...	Urban ...	117,630	42	48	50	57	61	87	79	76	76	85	67	70	798	3
		Rural ...	1,875,859	1,980	2,636	2,618	3,105	3,255	3,892	3,585	5,097	4,975	4,826	4,313	4,826	45,108	
		Total ...	1,993,489	2,022	2,684	2,668	3,162	3,316	3,979	3,664	5,173	5,051	4,911	4,380	4,896	45,906	
	TIRHUT DIVISION.																
4	Saran District...	Urban ...	70,475	89	80	77	113	10[illegible]	138	107	112	95	112	97	149	1,272	4
		Rural ...	2,415,993	3,511	3,499	3,434	3,885	4,14[illegible]	3,852	4,478	4,032	4,232	4,090	4,222	4,892	48,270	
		Total ...	2,486,468	3,600	3,579	3,511	3,998	4,24[illegible]	3,990	4,585	4,144	4,327	4,202	4,319	5,041	49,542	
5	Champaran District ...	Urban ...	45,486	67	74	72	53	8[illegible]	74	57	60	46	68	52	54	765	5
		Rural ...	2,100,201	3,760	2,709	2,973	2,692	3,47[illegible]	3,793	3,268	3,002	3,213	3,217	3,216	3,911	39,227	
		Total ...	2,145,687	3,827	2,783	3,045	2,745	3,561	3,867	3,325	3,062	3,259	3,285	3,268	3,965	39,992	
6	Muzaffarpur District ...	Urban ...	82,241	93	91	115	133	12[illegible]	109	106	105	127	138	155	170	1,462	6
		Rural ...	2,858,784	4,682	4,295	4,934	6,052	6,57[illegible]	5,963	5,010	4,149	5,090	5,190	7,277	6,633	65,845	
		Total ...	2,941,025	4,775	4,386	5,049	6,185	6,69[illegible]	6,072	5,116	4,254	5,217	5,328	7,432	6,803	67,307	
7	Darbhanga District ...	Urban ...	98,225	143	120	174	159	14[illegible]	113	127	134	122	189	167	212	1,807	7
		Rural ...	3,067,869	4,511	6,260	5,898	7,281	6,50[illegible]	5,792	4,685	4,293	5,346	5,470	7,186	7,981	71,205	
		Total ...	3,166,094	4,654	6,380	6,072	7,440	6,64[illegible]	5,905	4,812	4,427	5,468	5,659	7,353	8,193	73,012	
	BHAGALPUR DIVISION.																
8	Monghyr District ...	Urban ...	83,209	89	56	79	112	10[illegible]	158	105	98	113	130	116	94	1,257	8
		Rural ...	2,203,945	2,947	2,938	3,280	4,004	3,98[illegible]	3,754	4,018	3,868	4,450	5,981	5,336	4,735	49,299	
		Total ...	2,287,154	3,036	2,994	3,359	4,116	4,09[illegible]	3,912	4,123	3,966	4,563	6,111	5,452	4,829	50,556	
9	Bhagalpur District ...	Urban ...	89,080	97	74	117	114	13[illegible]	129	134	120	93	133	118	141	1,406	9
		Rural ...	2,145,552	5,048	5,358	4,946	5,783	5,12[illegible]	4,648	3,948	3,109	4,334	5,521	6,032	5,651	59,499	
		Total ...	2,234,632	5,145	5,432	5,063	5,897	5,25[illegible]	4,777	4,082	3,229	4,427	5,654	6,150	5,792	60,905	
10	Purnea District ...	Urban ...	46,223	46	45	39	72	3[illegible]	51	34		49	32	36	45	513	10
		Rural ...	2,140,320	5,812	5,769	5,239	6,167	6,01[illegible]	4,934	4,319	4,090	4,561	4,141	5,510	5,824	62,383	
		Total ...	2,186,543	5,858	5,814	5,278	6,239	6,04[illegible]	4,985	4,353	4,122	4,610	4,173	5,546	5,869	62,896	
11	Santal Parganas District ...	Urban ...	48,536	19	10	25	23	1[illegible]	35	16	17	19	19	16	10	227	11
		Rural ...	2,002,936	2,632	2,488	2,185	2,881	3,0[illegible]	3,072	3,098	3,131	3,080	2,819	2,934	2,723	34,098	
		Total ...	2,051,472	2,651	2,498	2,210	2,904	3,07[illegible]	3,107	3,114	3,148	3,099	2,838	2,950	2,733	34,325	

APPENDIX I—*contd.*

Annual Form No. III.—Deaths registered in the districts of Bihar Province, during each month of the year 1937—concld.

1	2		3													4	5
No.	District.		Population according to census, 1931.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	No.
	CHOTA NAGPUR DIVISION.																
	Hazaribagh District ...	Urban ...	50,857	33	31	41	42	[illegible]	41	39	47	40	41	41	45	475	
12		Rural ...	1,466,500	2,366	2,248	2,028	2,589	[illegible]	2,967	2,751	3,237	2,763	3,043	2,932	2,887	32,543	12
		Total ...	1,517,357	2,399	2,279	2,069	2,631	[illegible]	3,008	2,790	3,284	2,803	3,084	2,973	2,932	33,018	
	Ranchi District ...	Urban ...	58,094	53	40	27	59	[illegible]	56	69	78	40	61	12	28	568	
13		Rural ...	1,509,055	1,761	2,181	2,551	2,400	[illegible]	2,709	2,664	4,016	3,821	3,298	3,017	2,293	33,468	13
		Total ...	1,567,149	1,814	2,221	2,578	2,459	[illegible]	2,765	2,733	4,094	3,861	3,359	3,029	2,321	34,036	
	Palamau District ...	Urban ...	12,040	2	...	6	...	[illegible]	6	7	4	12	10	3	7	69	
14		Rural ...	806,696	1,578	1,583	1,609	1,844	[illegible]	2,304	1,821	2,369	2,287	2,230	2,353	2,149	23,828	14
		Total ...	818,736	1,580	1,583	1,615	1,844	[illegible]	2,310	1,828	2,373	2,299	2,240	2,856	2,156	23,897	
	Manbhum District ...	Urban ...	56,393	34	22	59	87	[illegible]	65	60	82	52	45	47	81	731	
15		Rural ...	1,754,497	2,511	2,478	2,452	2,627	[illegible]	2,605	2,496	2,891	2,770	2,658	2,162	2,574	31,006	15
		Total ...	1,810,890	2,545	2,500	2,511	2,714	[illegible]	2,670	2,556	2,973	2,822	2,703	2,209	2,655	31,737	
	Singhbhum District ...	Urban ...	30,697	66	37	47	84	[illegible]	64	56	56	53	56	41	48	674	
16		Rural ...	899,105	1,168	1,121	1,175	1,146	[illegible]	1,021	1,294	1,489	1,271	1,258	1,403	1,495	15,170	16
		Total ...	929,802	1,234	1,158	1,222	1,230	[illegible]	1,085	1,350	1,545	1,324	1,314	1,444	1,543	15,844	
	Total for the province ...	Urban ...	(a)1,336,393	1,289	1,672	1,328	1,600	[illegible]	1,760	1,626	1,729	1,583	1,807	1,646	1,766	18,777	
		Rural ...	31,035,041	49,345	50,717	50,628	59,427	[illegible]	60,992	57,662	59,397	62,736	64,021	67,359	67,626	710,677	
		Total ...	32,371,434	50,634	51,789	51,956	61,027	[illegible]	62,752	59,288	61,126	64,319	65,828	69,005	69,392	729,454	
	Ratio per 1,000 of population.	Urban ...	...	1·0	0·8	1·0	1·2	[illegible]	1·3	1·2	1·3	1·2	1·3	1·2	1·3	14·0	
		Rural ...	...	1·6	1·6	1 6	1·9	[illegible]	2·0	1·8	1·9	2·0	2·1	2·2	2 2	22·9	
		Total ...	...	1·6	1·6	1·6	1·9	[illegible]	1·9	1·8	1·9	2·0	2·0	2·1	2·1	22·5	

(a) Including cantonment population.

[APPEND]IX I—*contd.*

Annual Form No. IV.—Deaths registered according to a[ge] [in the d]istricts of Bihar Province, during the year 1937—contd.

No.	District		Deaths under one year: Not exceeding one month: Male: Under one week	Male: Over one week	Male: Total	Female: Under one week	Female: Over one week	Female: Total	Over one month and not exceeding six months: Male	Female	Total	Over six months and not exceeding twelve months: Male	Female	Total	Total male columns 3, 8 and 11	Total female columns 6, 9 and 12	Total	No.
1	2		1	2	3	4	5	6	8	9	10	11	12	13	14	15	16	
	PATNA DIVISION.																	
1	Patna district	Urban	107	36	143	98	45	143	110	97	207	92	90	182	345	330	675	1
		Rural	1,415	986	2,401	1,199	693	1,892	2,039	1,628	3,667	1,278	1,231	2,509	5,718	4,751	10,469	
		Total	1,522	1,022	2,544	1,297	738	2,035	2,149	1,725	3,874	1,370	1,321	2,691	6,063	5,081	11,144	
2	Gaya district	Urban	174	67	241	116	52	168	164	115	279	89	80	169	494	363	857	2
		Rural	3,307	1,117	4,424	2,677	1,007	3,684	2,711	2,251	4,962	1,952	1,810	3,762	9,087	7,745	16,832	
		Total	3,481	1,184	4,665	2,793	1,059	3,852	2,875	2,366	5,241	2,041	1,890	3,931	9,581	8,108	17,689	
3	Shahabad district	Urban	60	17	77	28	7	35	15	16	31	27	27	54	119	78	197	3
		Rural	4,359	722	5,081	3,342	624	3,966	1,680	1,419	3,099	1,475	1,172	2,647	8,236	6,557	14,793	
		Total	4,419	739	5,158	3,370	631	4,001	1,695	1,435	3,130	1,502	1,199	2,701	8,355	6,635	14,990	
	TIRHUT DIVISION.																	
4	Saran district	Urban	52	26	78	28	24	52	36	28	64	27	33	60	141	113	254	4
		Rural	1,842	925	2,767	1,359	698	2,057	1,301	974	2,275	1,055	831	1,886	5,123	3,862	8,985	
		Total	1,894	951	2,845	1,387	722	2,109	1,337	1,002	2,339	1,082	864	1,946	5,264	3,975	9,239	
5	Champaran district	Urban	26	4	30	17	5	22	21	12	33	12	9	21	63	43	106	5
		Rural	2,160	580	2,740	1,824	407	2,231	1,137	945	2,082	731	509	1,240	4,608	3,685	8,293	
		Total	2,186	584	2,770	1,841	412	2,253	1,158	957	2,115	743	518	1,261	4,671	3,728	8,399	
6	Muzaffarpur district	Urban	65	48	113	50	32	82	46	58	104	25	33	58	184	173	357	6
		Rural	1,729	833	2,562	1,357	559	1,916	1,384	1,218	2,602	866	726	1,592	4,812	3,860	8,672	
		Total	1,794	881	2,675	1,407	591	1,998	1,430	1,276	2,706	891	759	1,650	4,996	4,033	9,029	
7	Darbhanga district	Urban	70	30	100	33	25	58	44	44	88	30	18	48	174	120	294	7
		Rural	1,805	525	2,330	1,455	403	1,858	1,280	1,128	2,408	799	635	1,434	4,409	3,621	8,030	
		Total	1,875	555	2,430	1,488	428	1,916	1,324	1,172	2,496	829	653	1,482	4,583	3,741	8,324	
	BHAGALPUR DIVISION.																	
8	Monghyr district	Urban	53	26	79	36	20	56	40	23	63	42	44	86	161	123	284	8
		Rural	1,367	819	2,186	1,264	663	1,927	1,492	1,348	2,840	1,039	969	2,008	4,717	4,244	8,961	
		Total	1,420	845	2,265	1,300	683	1,983	1,532	1,371	2,903	1,081	1,013	2,094	4,878	4,367	9,245	
9	Bhagalpur district	Urban	43	32	75	28	35	63	42	43	85	41	36	77	158	142	300	9
		Rural	1,292	543	1,835	1,046	459	1,505	1,065	844	1,909	786	773	1,559	3,686	3,122	6,808	
		Total	1,335	575	1,910	1,074	494	1,568	1,107	887	1,994	827	809	1,636	3,844	3,264	7,108	
10	Purnea district	Urban	14	7	21	8	6	14	12	14	26	12	8	20	45	36	81	10
		Rural	1,315	528	1,843	1,094	450	1,544	1,844	1,510	3,354	793	690	1,483	4,480	3,744	8,224	
		Total	1,329	535	1,864	1,102	456	1,558	1,856	1,524	3,380	805	698	1,503	4,525	3,780	8,305	
11	Santal Parganas district	Urban	9	1	10	4	2		7	1	8	8	3	11	25	10	35	11
		Rural	876	263	1,139	584	[illegible]		657				[illegible]	765	2,199	1,647	3,846	
		Total	885	264	1,149	588												

APP[ENDIX] I—*contd.*

Annual Form No. IV.—Deaths registered according to age in [d]istricts of Bihar Province, during the year 1937—contd.

No.	District.		Under one week (Male)	Over one week (Male)	Total (Male)	Under one week (Female)	Over one week (Female)	Total (Female)	Total of columns 3 and 6.	Over one month and not exceeding six months: Male	Female	Total	Over six months and not exceeding twelve months: Male	Female	Total	Total male columns 3, 8 and 11.	Total female columns 6, 9 and 12.	Total.	No.
1	2		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	CHOTA NAGPUR DIVISION.																		
12	Hazaribagh district ...	Urban ...	9	1	10	4	6	10		22	14	36	13	10	23	45	34	79	12
		Rural ...	929	445	1,384	702	368	1,070		928	821	1,749	409	389	798	2,721	2,280	5,001	
		Total ...	938	456	1,394	706	374	1,080		950	835	1,785	422	399	821	2,766	2,314	5,080	
13	Ranchi district ...	Urban ...	14	11	25	13	3	16		14	9	23	7	4	11	46	29	75	13
		Rural ...	900	481	1,381	703	369	1,072		853	686	1,539	379	319	698	2,613	2,077	4,690	
		Total ...	914	492	1,406	716	372	1,088		867	695	1,562	386	323	709	2,659	2,106	4,765	
14	Palamau district ...	Urban ...	4	...	4	2	2	4		1	2	3	6	5	11	11	11	22	14
		Rural ...	979	434	1,413	766	367	1,133		710	619	1,329	475	418	893	2,598	2,170	4,768	
		Total ...	983	434	1,417	768	369	1,137		711	621	1,332	481	423	904	2,609	2,181	4,790	
15	Manbhum district ...	Urban ...	32	8	40	20	6	26		17	14	31	18	10	28	75	50	125	15
		Rural ...	748	344	1,092	528	255	783		721	422	1,143	269	226	495	2,082	1,431	3,513	
		Total ...	780	352	1,132	548	261	809		738	436	1,174	287	236	523	2,157	1,481	3,638	
16	Singhbhum district ...	Urban ...	15	5	20	11	5	16		15	13	28	15	15	30	50	44	94	16
		Rural ...	828	139	467	238	125	363		291	264	555	221	202	423	979	829	1,808	
		Total ...	343	144	487	249	130	379		306	277	583	236	217	453	1,029	873	1,902	
	Total for the Province ...	Urban ...	747	319	1,066	496	275	771		606	503	1,109	464	425	889	2,136	1,699	3,835	
		Rural ...	25,351	9,694	35,045	20,088	7,659	27,747		20,093	16,616	36,709	12,930	11,262	24,192	68,068	55,625	123,693	
		Total ...	26,098	10,013	36,111	20,584	7,934	28,518		20,699	17,119	37,818	13,394	11,687	25,081	70,204	57,324	127,528	
	Total population for the province ...		...	...	..	...	...	...		...	...	...	...	...	...	389,476	396,266	785,742	
	Ratio per 1,000 of population ...		...	...	...	...	...	...		...	...	...	...	...	...	180·2	144·6	162·3	

Annual Form No. IV.—Deaths registered according to a[ge] … [Dis]tricts of Bihar Province, during the year 1937—contd.

1	2		3		4		5		6	7		8		9		10		11		12
No.	District.		1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.	20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.		No.
			Male.	Female.	Male.	Female.	Male.	Female.	Male.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
			17	18	19	20	21	22	23	25	26	27	28	29	30	31	32	33	34	
	PATNA DIVISION.																			
1	Patna district ...	Urban ...	200	186	103	112	97	93	107	171	146	159	135	119	106	109	108	251	232	1
		Rural ...	4,534	4,494	780	727	422	398	365	967	1,128	963	1,011	1,020	850	1,384	1,297	3,380	3,751	
		Total ...	4,734	4,680	883	839	519	491	472	1,138	1,274	1,122	1,146	1,139	956	1,493	1,405	3,631	3,983	
2	Gaya district ...	Urban ...	348	288	88	85	41	48	58	139	174	138	122	144	92	138	94	282	298	2
		Rural ...	7,858	7,776	1,596	1,414	806	655	641	1,837	2,230	1,826	1,784	1,809	1,445	2,099	1,807	3,973	4,354	
		Total ...	8,206	8,064	1,684	1,499	847	703	699	1,976	2,404	1,964	1,906	1,953	1,537	2,237	1,901	4,255	4,652	
3	Shahabad district ...	Urban ...	66	74	17	18	13	15	13	37	31	22	24	29	16	33	20	70	77	3
		Rural ...	4,458	4,493	780	690	420	321	446	1,371	1,824	1,354	1,403	1,321	1,063	1,299	1,306	3,140	4,168	
		Total ...	4,524	4,567	797	708	433	336	459	1,408	1,855	1,383	1,427	1,350	1,079	1,332	1,326	3,210	4,245	
	TIRHUT DIVISION.																			
4	Saran district ..	Urban ...	104	71	17	20	14	5	20	49	60	64	69	41	32	34	31	206	163	4
		Rural ...	4,689	3,951	1,222	1,094	740	731	836	2,057	1,994	1,967	1,830	1,852	1,382	1,872	1,733	5,270	5,347	
		Total ...	4,793	4,022	1,239	1,114	754	736	856	2,106	2,054	2,031	1,899	1,893	1,414	1,906	1,764	5,476	5,510	
5	Champaran district ...	Urban ...	75	70	24	18	28	18	23	44	41	70	35	39	16	38	23	44	37	5
		Rural ...	3,757	3,236	1,017	787	578	357	614	1,898	1,761	2,069	1,615	2,156	1,614	2,123	1,880	2,552	2,474	
		Total ...	3,832	3,306	1,041	805	606	375	637	1,942	1,802	2,139	1,650	2,195	1,630	2,161	1,903	2,596	2,511	
6	Muzaffarpur district ...	Urban ...	134	102	53	35	33	17	34	77	78	82	43	64	38	64	35	89	96	6
		Rural ...	6,861	6,410	2,474	2,086	1,372	982	1,196	3,253	2,658	3,405	2,664	3,233	2,621	3,520	3,252	4,718	5,526	
		Total ...	6,995	6,512	2,527	2,121	1,405	999	1,230	3,330	2,736	3,487	2,707	3,297	2,659	3,584	3,287	4,807	5,622	
7	Darbhanga district ...	Urban ...	149	128	77	61	54	30	37	108	110	161	72	95	58	82	55	103	103	7
		Rural ...	7,159	6,445	3,139	2,496	1,744	1,105	1,449	4,048	3,392	4,149	3,290	3,762	2,929	3,641	3,458	4,626	5,162	
		Total ...	7,308	6,573	3,216	2,557	1,798	1,135	1,486	4,156	3,502	4,310	3,362	3,857	2,987	3,723	3,513	4,732	5,265	
	BHAGALPUR DIVISION.																			
8	Monghyr district ...	Urban ...	160	134	35	28	26	20	25	44	67	27	40	58	21	30	15	93	120	8
		Rural ...	6,381	6,218	1,448	1,254	690	591	651	1,716	1,694	1,764	1,542	1,926	1,389	2,248	2,121	3,952	4,183	
		Total ...	6,541	6,352	1,483	1,282	716	611	676	1,760	1,751	1,791	1,582	1,984	1,410	2,278	2,136	4,045	4,303	
9	Bhagalpur district ...	Urban ...	128	117	32	28	40	29	29	84	65	75	44	70	29	51	58	130	73	9
		Rural ...	5,895	5,541	2,448	1,985	1,538	1,089	1,297	3,159	3,178	3,459	3,078	3,054	2,530	2,813	2,535	3,998	3,998	
		Total ...	6,023	5,658	2,480	2,013	1,578	1,118	1,326	3,243	3,243	3,534	3,122	3,124	2,559	2,864	2,593	4,104	4,071	
10	Purnea district ...	Urban ...	31	32	23	11	14	6	12	43	23	38	38	27	16	19	17	24	35	10
		Rural ...	6,178	5,693	2,709	2,001	1,459	911	1,321	3,560	4,255	3,738	3,494	3,576	2,573	2,848	2,280	3,397	2,945	
		Total ...	6,209	5,725	2,732	2,012	1,473	917	1,333	3,603	4,278	3,776	3,532	3,603	2,589	2,867	2,297	3,421	2,980	
11	Santal Parganas district ...	Urban ...	19	20	10	5	4	3	4	10	12	14	5	15	6	15	7	22	19	11
		Rural ...	3,355	2,799	1,598	1,287	937	735	1,032	1,946	1,920	1,967	1,565	1,802	1,290	1,705	1,437	2,049	1,900	
		Total ...	3,374	2,819	1,608	1,292	941	738	1,036	1,956	[illegible]	[illegible]	[illegible]	[illegible]	1,296	1,720	1,444	2,071	1,919	

APPENDIX I—*contd.*

Annual Form No. IV.—Deaths registered according to age in the Districts of Bihar Province during the year 1937—concld.

1	2	3		4		5		6	
No.	District.	1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
		17	18	19	20	21	22	23	24
	CHOTA NAGPUR DIVISION.								
12	Hazaribagh district ... Urban ...	49	48	19	13	14	18	8	[illegible]
	Rural ...	3,899	3,523	1,487	1,313	738	658	615	[illegible]
	Total ...	3,948	3,571	1,506	1,326	752	676	623	[illegible]
13	Ranchi district ... Urban ...	60	40	17	18	20	12	13	[illegible]
	Rural ...	4,111	3,583	1,206	947	721	602	719	[illegible]
	Total ...	4,171	3,623	1,223	965	741	614	732	[illegible]
14	Palamau district ... Urban ...	12	6	3	1	2	1	4	[illegible]
	Rural ...	3,533	3,281	920	774	411	334	391	[illegible]
	Total ...	3,545	3,287	923	775	413	335	395	[illegible]
15	Manbhum district ... Urban ...	68	36	20	20	19	11	24	[illegible]
	Rural ...	2,596	2,150	1,200	1,085	893	617	1,172	[illegible]
	Total ...	2,664	2,186	1,220	1,105	912	628	1,196	[illegible]
16	Singhbhum district ... Urban ...	42	37	9	13	14	16	18	[illegible]
	Rural ...	1,935	1,573	759	674	404	313	387	[illegible]
	Total ...	1,977	1,610	768	687	418	329	405	[illegible]
	Total for the Province ... Urban ...	1,645	1,389	547	486	433	342	429	[illegible]
	Rural ...	77,199	71,166	24,783	20,614	13,873	10,399	13,132	[illegible]
	Total ...	78,844	72,555	25,330	21,100	14,306	10,741	13,561	[illegible]
	Total population for the province ...	1,996,260	2,110,112	2,330,522	2,129,096	2,005,728	1,767,032	1,322,530	1,[illegible]
	Ratio per 1,000 of population ...	39·5	34·4	10·9	9,9	7·1	6·1	10·2	[illegible]

7		8		9		10		11		12
20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.		No
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
25	26	27	28	29	30	31	32	33	34	
23	21	21	18	16	13	20	22	40	26	12
1,426	1,499	1,505	1,236	1,463	1,097	1,629	1,516	1,656	1,715	
1,449	1,520	1,526	1,254	1,479	1,110	1,649	1,538	1,696	1,741	
30	35	38	16	39	10	40	14	41	37	13
1,481	1,692	1,545	1,210	1,490	1,141	1,916	1,689	1,984	2,008	
1,511	1,727	1,583	1,226	1,529	1,151	1,956	1,703	2,025	2,045	
5	3	2	1	1	1	1	1	1	1	14
946	1,046	943	871	989	785	891	822	828	907	
951	1,049	945	872	990	786	892	823	829	908	
42	51	31	20	56	23	...	25	51	50	15
1,856	1,768	1,940	1,407	1,661	1,077	1,815	1,304	2,143	1,880	
1,898	1,819	1,971	1,427	1,717	1,100	1,855	1,329	2,194	1,930	
58	54	76	23	64	23	40	14	32	13	16
680	516	804	536	725	457	766	653	759	955	
738	669	880	559	789	480	806	667	791	968	
964	961	1,025	705	877	500	754	539	1,479	1,380	17
32,201	32,654	33,398	28,536	31,839	24,243	32,569	29,090	48,404	51,273	
33,165	33,615	34,423	29,241	32,716	24,743	33,323	29,629	49,883	52,653	
2,763,352	2,894,276	2,341,958	2,314,501	1,595,753	1,513,295	904,766	913,225	594,542	727,186	
12·0	11·6	14·7	12·6	20·5	16·3	36·8	32·4	83·9	72·4	

18 9 D.P.H.

APPENDIX I—*contd.*

Annual form No. IVA.—Deaths under one year registered according to class in each town and rural areas in the districts of Bihar Province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other classes.			Total.		
——	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
PATNA.																		
Patna town	...	...	...	154	132	286	38	46	84	...	...	...	...	...	...	192	178	370
Bihar town	...	...	...	47	48	95	6	7	13	...	...	...	...	...	...	53	55	108
Dinapur Nizamat...	...	...	...	23	38	61	5	2	7	...	...	...	...	...	...	28	30	58
Dinapur Cantonment	...	...	...	25	32	57	4	3	7	...	...	...	...	...	...	29	25	64
Barh town	...	...	...	19	9	28	2	3	5	...	...	...	...	...	...	21	12	33
Khagole town	...	...	...	18	19	37	4	1	5	...	...	...	...	...	...	22	20	42
Total of towns ...	...	...	...	286	268	554	59	62	121	...	...	...	...	...	...	345	330	675
Total of rural ...	...	...	...	5,492	4,557	10,049	226	194	420	...	...	...	...	...	...	5,718	4,751	10,469
Total of district ...	...	...	...	5,778	4,825	10,603	285	256	541	...	...	...	...	...	...	6,063	5 081	11,144
GAYA.																		
Gaya town	...	...	...	348	260	608	94	61	155	...	...	...	...	...	...	442	321	763
Tikari town	...	...	...	10	8	18	1	3	4	...	...	...	...	...	...	11	11	22
Daudnagar town	...	...	...	32	25	57	9	6	15	...	...	...	...	...	...	41	31	72
Total of towns ...	...	...	...	390	293	683	104	70	174	...	...	...	...	...	...	494	363	857
Total of rural ...	...	...	...	8,424	7,272	15,696	663	473	1,136	...	...	...	...	...	...	9,087	7,745	16,832
Total of district ...	...	...	...	8,814	7,565	16,37[illegible]	767	543	1,310	...	...	...	...	...	...	9,581	8,108	17,689
SHAHABAD.																		
Arrah town	...	...	...	23	12	3[illegible]	3	1	4	...	...	...	...	...	...	26	13	39
Buxar town	...	...	...	29	25	54	6	1	7	...	...	...	...	...	...	35	26	61
Dumraon town	...	...	...	5	2	7	...	...	...	...	...	...	...	...	...	5	2	7
Jagadispur town	...	...	...	10	4	14	4	2	6	...	...	...	...	...	...	14	6	20
Sasaram town	...	...	...	27	21	4[illegible]	5	4	9	...	...	...	...	...	...	32	25	57
Bhabua town	...	...	...	7	4	1[illegible]	...	2	2	...	...	...	...	...	...	7	6	13
Total of towns ...	...	...	...	101	68	16[illegible]	13	10	28	...	...	...	...	...	...	119	78	197
Total of rural ...	...	1	1	7,916	6,269	14,18[illegible]	320	287	607	...	...	...	...	...	...	8,236	6,557	14,793
Total of district ...	...	1	1	8,017	6,337	14,35[illegible]	338	297	635	...	...	...	...	...	...	8,355	6,635	14,990

APPENDIX I—*contd.*

Annual form No. IVA.—Deaths under one year registered according to class in each town and rural areas in the districts of Bihar Province during the year 1937—contd

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other classes.			Total.		
——	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
SARAN.																		
Chapra town	...	...	...	82	61	[illegible]	20	14	34	...	...	...	...	...	...	102	75	177
Revelganj town	...	...	...	18	20	[illegible]	...	2	2	...	...	...	...	...	...	18	22	40
Siwan town	...	...	...	20	14	[illegible]	1	2	3	...		...	...	...	...	21	16	37
Total of towns ...	...	...	...	120	95	[illegible]	21	18	39	...	...	...	...	...	...	141	113	254
Total of rural ...	...	...	...	4,077	3,050	[illegible]	1,046	812	1,858	...	...		...	...	...	5,123	3,862	8,985
Total of district ...	...	...	...	4,197	3,145	[illegible]	1,067	830	1,897	...	...	...	...	...	...	5,264	3,975	9,239
CHAMPARAN.																		
Bettiah town	2	2	4	27	21	[illegible]	15	7	22	...	...	...	...	...	...	44	30	74
Motihari town	...	...	...	16	9	[illegible]	3	4	7	...	...	...	...	...	...	19	13	32
Total of towns ...	2	2	4	43	30	[illegible]	18	11	29	...	...	...	...	...	...	63	43	106
Total of rural ...	2	3	5	4,010	3,193	[illegible]	596	489	1,085	...	...	...	...	...	...	4,608	3,685	8,293
Total of district ...	4	5	9	4,053	3,223	[illegible]	614	500	1,114	...	...	...	...	...	...	4,671	3,728	8,399
MUZAFFARPUR.																		
Muzaffarpur town	...	...	...	59	34	[illegible]	20	19	39	...	...	...	...	...	...	79	78	152
Sitamarhi town	...	...	...	20	22	[illegible]	3	6	9	...	...	...	...	...	...	23	28	51
Hajipur town	...	...	...	43	33	[illegible]	9	11	20	...	...	...	...	...	...	52	44	96
Lalganj town	...	...	...	20	22	[illegible]	4	2	6	...	...	...	...	...	...	30	28	58
Total of towns	...	...	...	143	135	[illegible]	36	38	74	...	...	...	...	...	...	184	173	357
Total of rural	1	1	2	4,011	3,224	[illegible]	800	635	1,435	...	...	...	...	...	...	4,812	3,860	8,672
Total of district	1	1	2	4,159	3,359	[illegible]	836	673	1,509	...	...	...	...	...	...	4,996	4,033	9,029
DARBHANGA.																		
Darbhanga town	...	...	...	114	88	[illegible]	4	1	5	...	...	...	...	...	...	118	89	207
Rosera town	...	...	...	9	7	[illegible]	...	...	...	...	...	...	...	...	...	9	7	16
Samastipur town	...	...	...	15	11	[illegible]	...	...	...	...	...	...	...	...	...	15	11	26
Madhubani town	...	...	...	32	13	[illegible]	...	...	...	...	...	...	...	...	...	32	13	45
Total of towns	...	...	...	170	119	[illegible]	4	1	5	...	...	...	...	...	...	174	120	294
Total of rural	...	...	...	3,419	2,855	[illegible]	990	766	1,756	...	...	...	...	...	...	4,409	3,621	8,030
Total of district	...	...	...	3,589	2,974	[illegible]	994	767	1,761	...	...	...	...	...	...	4,583	3,741	8,324

APPENDIX I—*contd.*

Annual form No. IVA.—Deaths under one year according to class in each town and rural areas in the districts of Bihar Province during the year 1937—contd.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
MONGHYR																		
Monghyr town	...	...	...	75	54	129	26	13	39	...	...	...	...	...	...	101	67	168
Jamalpur town	...	...	...	48	42	90	12	14	26	...	...	...	...	...	...	60	56	116
Total of towns	...	...	...	123	96	219	38	27	65	...	...	...	...	...	...	161	123	284
Total of rural	...	...	...	3,708	3,430	7,138	1,009	814	1,823	...	...	...	...	...	...	4,717	4,244	8,961
Total of district	...	...	...	3,831	3,526	7,357	1,047	841	1,838	...	...	...	...	...	...	4,878	4,367	9,245
BHAGALPUR.																		
Bhagalpur town	...	...	...	125	122	247	12	8	20	...	...	...	...	...	...	139	130	267
Colgong town	...	...	...	20	12	32	1	...	1	...	...	...	...	...	...	21	12	33
Total of towns	...	...	...	145	134	279	13	8	21	...	...	...	...	...	...	158	142	300
Total of rural	...	...	...	3,142	2,646	5,788	544	476	1,020	...	...	...	...	...	...	3,686	3,122	6,808
Total of district	...	...	...	3,287	2,780	6,067	557	484	1,041	...	...	...	...	...	...	3,844	3,264	7,180
PURNEA.																		
Purnea town	...	...	...	11	12	23	3	4	7	...	...	...	...	...	...	14	16	30
Kishenganj town	...	...	...	7	4	11	6	1	7	...	...	...	...	...	...	13	5	18
Katihar town	...	...	...	4	7	11	2	1	3	...	...	...	...	...	...	6	10	16
Forbesganj town	...	...	...	10	5	15	2	...	2	...	...	...	...	...	...	12	5	17
Total of towns	...	...	...	32	30	62	13	6	19	...	...	...	...	...	...	45	36	81
Total of rural	...	...	...	2,757	2,293	5,050	1,723	1,451	3,174	...	...	...	...	...	...	4,480	3,744	8,224
Total of district	...	...	...	2,789	2,323	5,112	1,736	1,457	3,193	...	...	...	...	...	...	4,525	3,780	8,305
SANTAL PARGANAS.																		
Sahibganj town	...	...	...	4	3	7	...	...	...	...	...	...	...	2	2	4	5	9
Deoghar town	...	...	...	10	2	12	...	...	...	...	...	...	...	...	...	10	2	12
Dumka town	...	...	...	5	1	6	...	...	...	...	...	...	...	...	...	5	1	6
Madhupur town	...	...	...	5	2	7	1	...	1	...	...	...	...	...	...	6	2	8
Total of towns	...	...	...	24	8	32	1	...	1	...	...	...	...	2	2	25	10	35
Total of rural	...	1	1	1,623	1,190	2,813	62	45	107	...	...	...	514	411	925	2,199	1,647	3,846
Total of district	...	1	1	1,647	1,198	2,845	63	45	108	...	...	...	514	413	927	2,224	1,657	3,881
HAZARIBAGH.																		
Hazaribagh town	...	...	...	10	12	22	4	...	4	...	...	...	...	...	...	14	12	26
Chatra "	...	...	...	21	9	30	2	2	4	...	...	...	...	...	...	23	11	34
Giridih "	...	...	...	8	9	17	...	2	2	...	...	...	...	...	...	8	11	19
Total of towns	...	...	...	39	30	69	6	4	10	...	...	...	...	...	...	45	34	79
Total of rural	1	1	2	2,437	2,027	4,464	280	246	526	...	...	...	3	6	9	2,721	2,280	5,001
Total of district	1	1	2	2,476	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	...	...	...	[illegible]	6	9	2,766	2,314	5,080

APPENDIX I—*contd.*

Annual form No. IVA.—Deaths under one year registered according to class in each town and rural areas in the districts of Bihar Province during the year 1937—concld.

1	2			3			4			5			6			7		
Registering circle.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other classes.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
RANCHI.																		
Ranchi town	7	4	11	20	10	30	5	4	9	...	...	...	1	1	2	33	19	52
Lohardaga "	4	1	5	6	4	10	1	3	4	...	...	...	2	2	4	13	10	23
Total of towns	11	5	16	26	14	40	6	7	13	...	...	...	3	3	6	46	29	75
Total of rural	573	399	972	976	704	1,680	194	124	318	...	...	...	870	850	1,720	2,613	2,077	4,690
Total of district	584	404	988	1,002	718	1,720	200	131	331	...	...	...	873	853	1,726	2,659	2,106	4,765
PALAMAU.																		
Daltonganj town... ...	...	...	...	10	9	19	1	2	3	...	...	...	...	...	...	11	11	22
Total of rural	15	15	30	2,417	2,016	4,433	166	139	305	...	...	...	...	...	...	2,598	2,170	4,768
Total of district	15	15	30	2,427	2,025	4,452	167	141	308	...	...	...	...	...	...	2,609	2,181	4,790
MANBHUM.																		
Purulia town	...	...	...	32	15	47	...	...	...	...	...	...	...	...	...	32	15	47
Raghunathpur town	...	...	...	24	13	37	...	...	...	...	...	...	...	...	...	24	13	37
Jhalda town	...	...	...	8	8	16	...	...	...	...	...	...	...	...	...	6	6	12
Dhanbad town	...	...	...	12	14	36	1	2	3	...	...	...	...	...	...	13	16	29
Total of towns	...	...	...	74	48	122	1	2	3	...	...	...	...	...	...	75	50	125
Total of rural	...	...	...	1,995	1,337	3,332	58	61	119	...	...	...	29	33	62	2,082	1,431	3,513
Total of district	...	...	...	2,069	1,385	3,454	59	63	122	...	...	...	29	33	62	2,157	1,481	3,638
SINGHBHUM.																		
Chaibassa town	...	...	...	11	14	25	4	...	4	...	...	...	...	3	3	15	17	32
Chakradharpur town	...	...	...	9	10	19	1	...	1	...	...	...	...	...	...	10	10	20
Jugsalai town	1	...	1	6	5	11	2	1	3	...	...	...	...	...	...	9	6	15
Jamshedpur town	1	1	2	13	7	20	2	2	4	...	...	...	...	1	1	16	11	27
Total of towns	2	1	3	39	36	75	9	3	12	...	...	...	...	4	4	50	44	94
Total of rural	10	6	16	605	494	1,099	5	8	13	...	...	...	359	321	680	979	829	1,808
Total of district	12	7	19	644	530	1,174	14	11	25	...	...	...	359	325	684	1,029	873	1,902
Province.																		
Total of towns	15	8	23	1,770	1,413	3,183	348	269	617	...	...	...	3	9	12	2,136	1,699	3,835
Total of rural	602	427	1,029	57,009	46,557	103,566	8,682	7,020	15,702	...	...	...	1,775	1,621	3,396	68,068	55,625	123,693
Total of districts	617	435	1,052	58,779	47,970	106,749	9,030	[illegible]	[illegible]	...	...	...	[illegible]	1,630	3,408	70,204	57,324	127,528

APPENDIX I—*contd.*

Annual Form No. V.—Deaths registered according to class in districts of Bihar Province during the year 1937—contd.

1	2	3														
		Number of deaths registered.														
No.	District.	Christians.			Hindus.			Muhammadans.			Buddhists.			Other classes.	
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
	PATNA DIVISION.														
1	Patna	...	3	3	19,419	18,674	38,093	1,775	1,728	3,503	...	...	...	...	...
2	Gaya	...	2	2	30,232	28,623	58,855	3,162	2,853	6,014	3	1	4	5	2
3	Shahabad	1	2	3	21,857	21,412	43,260	1,393	1,241	2,634	...	...	...	...	...
	TIRHUT DIVISION.														
4	Saran	...	...	...	23,411	20,842	44,253	2,907	2,382	5,289	...	...	...	...	...
5	Champaran ...	48	37	85	18,676	15,615	34,291	3,096	2,520	5,616	...	...	...	...	...
6	Muzaffarpur ...	6	5	11	31,217	27,873	59,090	4,435	3,771	8,206	...	...	...	...	...
7	Darbhanga ...	1	...	1	34,253	30,033	64,286	4,915	3,810	8,725	...	...	...	...	...
	BHAGALPUR DIVISION.														
8	Monghyr	15	10	25	23,957	22,392	46,349	2,179	2,002	4,181	...	...	...	1	...
9	Bhagalpur ...	8	3	11	28,966	26,120	55,086	3,145	2,662	5,807	...	...	...	1	...
10	Purnea	4	14	18	20,370	18,112	38,482	13,147	11,223	24,370	...	...	...	21	5
11	Santal Parganas ...	51	37	88	10,027	8,562	18,589	1,405	1,095	2,500	...	...	...	7,245	5,903
	CHOTA NAGPUR DIVISION.														
12	Hazaribagh ...	7	11	18	15,622	14,116	29,738	1,648	1,381	3,029	...	...	...	117	116
13	Ranchi	2,474	2,154	4,628	6,216	5,405	11,621	610	522	1,132	...	...	...	8,830	7,825
14	Palamau	73	65	138	11,377	10,470	21,847	1042	870	1,912	...	...	...	...	...
15	Manbhum ...	23	7	30	15,671	12,355	28,026	827	644	1,471	..	...	...	1,263	947
16	Singhbhum ...	74	66	140	4,080	3,349	7,429	101	67	168	...	...	...	4,346	3,761
	Total for the Province	2,785	2,416	5,201	315,351	283,953	599,304	45,787	38,770	84,557	3	1	4	21,829	18,559

4															
Ratio of deaths per 1,000 of population.															
Christians.			Hindus.			Muhammadans.			Buddhists.			Other classes.			No.
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
...	1·8	0·8	22·7	23·7	23·2	17·5	17·0	17·2	...	...	...	...	...	...	1
...	7·0	3·5	28·1	27·0	22·9	26·9	20·9	23·7	230·7	100·0	210·5	12·4	5·5	9·1	2
0·9	1·5	1·2	23·6	20·3	23·5	19·0	15·8	17·4	...	...	...	...	...	...	3
...	...	...	21·8	18·8	[illegible]	19·6	14·7	17·1	...	...	...	...	...	...	4
28·5	18·7	23·2	20·7	17·6	19·2	17·6	14·1	15·8	...	...	...	...	...	...	5
12·5	12·3	12·4	24·8	21·6	23·4	24·0	18·3	21·0	...	...	...	...	...	...	6
3·5	...	1·9	25·3	21·9	23·6	22·8	16·9	19·8	...	...	...	...	...	...	7
14·2	11·6	13·0	23·2	22·0	22·6	19·9	16·8	18·3	...	...	...	0·2	...	0·1	8
9·1	4·4	7·0	28·8	26·7	27·8	25·1	21·4	23·2	...	...	...	0·5	...	0·2	9
4·1	16·4	9·9	30·6	29·2	29·9	28·8	26·1	27·5	...	...	...	3·0	0·8	2·0	10
7·8	5·3	6·5	21·8	18·8	19·5	12·4	9·8	11·2	...	...	...	16·8	13·5	15·2	11
4·1	7·5	5·6	26·1	23·1	24·6	19·4	15·8	17·6	...	...	...	1·7	1·7	1·7	12
19·0	16·2	17·6	14·3	12·4	13·3	17·4	16·1	17·1	...	...	...	49·1	41·3	45·1	13
17·2	14·9	16·0	33·9	31·3	32·6	27·9	23·4	25·7	...	...	...	...	...	...	14
5·8	1·8	8·9	19·1	16·0	17·6	13·4	12·9	13·2	...	...	...	25·1	19·3	22·1	15
7·3	6·9	7·2	17·1	15·0	16·1	6·1	6·5	6·2	...	...	...	21·2	17·2	19·2	16
16·8	14·5	15·6	24·1	22·0	23·1	22·3	18·6	20·4	8·8	5·5	7·6	22·2	18·5	20·4	

Annual Form no. VA.—Death rates according to class, in urban and rural areas separately in each district of Bihar province during the year 1937.

Number.	Districts.		Christians.	Hindus.	Muhammadans.	Buddhists.	Other classes.	Total.
1	2		3	4	5	6	7	8
1	Patna ...	Urban ...	0·7	13·6	9·9	...	...	12·5
		Rural ...	1·2	24·4	20·9	...	...	24·2
2	Gaya ...	Urban ...	3·9	35·1	29·0	...	11·3	33·4
		Rural ...	...	27·3	23·1	222·2	6·1	26·8
3	Shahabad ...	Urban ...	...	6·8	7·0	...	...	6·8
		Rural ...	1·5	24·3	20·0	...	...	24·0
4	Saran ...	Urban ...	...	18·5	16·7	...	...	18·0
		Rural ...	...	20·3	17·1	...	...	19·9
5	Champaran ...	Urban ...	37·4	15·8	16·3	...	...	16·8
		Rural ...	9·0	19·2	15·8	...	...	18·7
6	Muzaffarpur ...	Urban ...	3·6	18·7	15·2	...	...	17·8
		Rural ...	26·8	23·4	21·3	...	...	23·0
7	Darbhanga ...	Urban ...	2·6	21·0	11·4	...	...	18·4
		Rural ...	...	23·6	20·4	...	...	23·2
8	Monghyr ...	Urban ...	1·5	15·8	13·3	...	...	15·1
		Rural ...	38·4	22·8	18·7	...	0·1	22·4
9	Bhagalpur ...	Urban ...	2·5	17·0	11·1	...	...	15·7
		Rural ...	11·5	28·1	24·6	...	0·3	27·7
10	Purnea ...	Urban ...	41·9	10·1	12·6	...	...	11·1
		Rural ...	3·3	30·4	27·7	...	2·0	29·1
11	Santal Parganas	Urban ...	2·6	5·0	2·8	...	10·6	4·6
		Rural ...	6·8	20·2	11·5	...	15·2	17·0
12	Hazaribagh ...	Urban ...	1·9	10·5	7·0	...	...	9·3
		Rural ...	7·6	25·0	18·5	...	1·7	22·2
13	Ranchi ...	Urban ...	7·3	12·2	7·4	...	2·3	9·7
		Rural ...	17·9	13·4	19·7	...	45·5	22·2
14	Palamau ...	Urban ...	...	6·0	3·8	...	...	5·7
		Rural ...	16·3	33·0	26·4	...	...	29·5
15	Manbhum ...	Urban ...	2·9	13·9	8·1	...	85·1	12·9
		Rural ...	2·2	17·7	13·5	...	22·2	17·6
16	Singhbhum ...	Urban ...	4·5	6·6	4·3	...	3·3	5·9
		Rural ...	8·2	18·2	11·7	...	19·4	16·3
	Total for the Province ...	Urban ...	8·2	16·1	12·3	...	5·8	14·0
		Rural ...	16·2	23·4	21·1	9·9	20·4	22·9

STATEMENT No. VI.

APPENDIX I—*contd.*

Annual Form No. VI.—Deaths registered from different causes in districts and towns of Bihar Province, during the year 1937—contd.

1	2	3			4			5			6	7	8	9	10
No.	Districts and Towns.	Population according to census of 1931. Male.	Female.	Total.	Births. Male.	Female.	Total.	Birth rates. Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.
	DISTRICTS EXCLUDING TOWNS.														
	PATNA DIVISION.														
1	Patna	811,800	776,390	1,588,190	32,019	31,120	63,139	20·3	19·6	39·8	1,141	508	...	23,612	804
2	Gaya	1,134,074	1,149,203	2,283,277	54,941	52,423	107,364	24·1	22·9	47·0	1,402	1,035	...	45,959	117
3	Shahabad ...	936,948	938,911	1,875,859	41,970	39,004	81,054	22·0	21·0	43·3	213	702	1	34,256	22
	TIRHUT DIVISION.														
4	Saran	1,181,847	1,234,146	2,415,993	46,681	44,743	91,424	19·3	18·5	37·8	240	753	1,085	27,777	201
5	Champaran ...	1,055,771	1,044,430	2,100,201	35,650	33,906	69,556	17·0	16·1	33·1	40	294	6	32,660	15
6	Muzaffarpur ...	1,397,930	1,460,854	2,858,784	48,453	46,280	94,733	16·0	16·2	33·1	1,815	96	271	57,231	44
7	Darbhanga ...	1,518,105	1,549,764	3,067,869	49,236	46,602	95,838	16·0	15·2	31·2	1,423	258	42	63,162	290
	BHAGALPUR DIVISION.														
8	Monghyr ...	1,101,576	1,102,369	2,203,945	41,779	39,995	81,774	19·0	18·1	37·1	2,360	391	...	37,106	63
9	Bhagalpur ...	1,081,084	1,064,468	2,145,553	33,454	33,235	65,689	15·6	15·0	30·6	2,668	381	5	50,998	58
10	Purnea	1,101,882	1,038,438	2,140,320	30,577	28,039	58,616	14·3	13·1	27·4	237	292	...	58,770	42
11	Santal Parganas ...	998,960	1,003,976	2,002,936	28,[illegible]35	26,940	55,175	14·1	13·4	27·5	1,227	625	..	20,137	93
	CHOTA NAGPUR DIVISION.														
12	Hazaribagh ...	725,619	740,881	1,466,500	27,577	26,761	54,336	18·8	18·2	37·0	310	61	...	27,694	86
13	Ranchi	746,329	762,726	1,509,055	24,549	23,907	48,455	16·3	15·8	32·1	51	48	...	27,444	979
14	Palamau ...	403,177	403,519	806,696	16,938	16,331	33,269	21·0	20·9	41·2	20	831	...	19,679	8
15	Manbhum ...	908,615	845,8[illegible]2	1,754,407	25,888	24,078	49,966	14·7	13·7	28·4	148	655	...	27,054	84
16	Singhbhum ...	401,278	414,089	815,367	11,638	10,821	22,459	12·5	11·6	24·1	196	141	...	13,415	71
	Total for the province.	15,504,995	15,530,046	31,035,041	549,582	523,265	1,072,847	17·7	16·8	34·5	13,521	7,071	1,410	575,980	2,[illegible]76
	TOWNS.														
	PATNA DISTRICT.														
1	Patna City ...	92,238	67,452	159,690	1,231	1,138	2,[illegible]69	7·7	7·1	14·8	53	10	...	557	310
2	Bihar	24,532	22,462	46,9[illegible]4	368	370	738	7·8	7·9	15·7	6	10	...	133	20
3	Dinapore ...	12,347	11,874	24,221	220	240	460	9·4	9·9	19·3	8	3	...	141	30
4	Barh	5,179	4,571	9,750	123	121	244	12·6	12·4	25·0	1	1	...	88	10
5	Khagole ...	4,119	3,293	7,412	9[illegible]	71	163	12·4	9·5	21·9	3	2	..	73	6
	GAYA DISTRICT.														
	Gaya	50,625	37,380	88,005	1,371	1,251	2,622	15·6	14·2	29·8	75	28	...	1,862	123
	Tikari	26,887	2,794	5,481	124	122	246	22·6	22·2	44·8	...	4	..	58	1
	Daudnagar ...	6,257	5,442	11,699	236	226	462	20·3	19·3	39·5	8	7	...	152	3

2	11		12				13	14			15												16
Districts and Towns.	Suicide. Male.	Female.	Injuries. Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.	Total.	All other causes.	Total deaths from all causes. Male.	Female.	Total.	Ratio of deaths per 1,000 of population. Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes. Male.	Female.	Total.	Mean of previous five years.	No.
Patna		94	178	233	5	572	10,7[illegible]3	19,533	18,830	38,363	0·7	0·3	...	14·8	0·5	0·6	0·3	6·7	24·6	24·2	24·2	21·7	1
Gaya		58	222	253	20	634	1[illegible],1[illegible]2	31,532	29,833	61,365	0·6	0·4	...	20·1	0·05	0·03	0·03	5·3	27·8	26·1	26·8	8	2
Shahabad		52	199	154	2	441	9,458	22,825	22,283	45,103	0·1	0·3	0·0005	18·2	0·01	0·008	0·2	5·0	24·3	23·7	24·0	24·0	3
Saran		130	277	456	12	955	16,591	25,628	22,642	48,270	0·09	0·3	0·4	11·5	0·08	0·2	0·4	6·8	21·6	18·3	19·9	20·7	4
Champaran		12	122	312	8	472	5,725	21,372	17,855	39,227	0·01	0·1	0·002	15·5	0·007	0·004	0·2	2·7	20·2	17·1	18·7	21·7	5
Muzaffarpur		16	389	531	11	947	5,429	34,844	31,001	65,845	0·6	0·03	0·09	20·0	0·01	0·007	0·3	1·9	24·0	21·2	23·0	23·7	6
Darbhanga		25	637	568	13	1,251	4,738	38,129	33,076	71,205	0·4	0·08	0·01	20·6	0·09	0·01	0·4	1·5	25·1	21·3	23·2	21·3	7
Monghyr		11	184	292	6	504	8,853	25,493	23,806	49,299	1·1	0·2	...	16·8	0·08	0·01	0·2	4·0	23·1	21·6	22·4	23·8	8
Bhagalpur		18	126	257	5	438	4,936	31,323	28,176	59,4[illegible]9	1·2	0·2	0·0002	23·7	0·02	0·006	0·2	2·3	28·9	2[illegible]·4	27·7	23·6	9
Purnea		54	44	297	...	447	3,580	33,266	29,117	62,383	0·[illegible]	0·1	..	27·4	0·02	0·007	0·2	1·2	30·2	28·0	29·1	24·5	10
Santal Parganas		36	80	107	2	279	2,512	18,590	15,508	34,098	0·6	0·3	...	14·5	0·04	0·1	0·1	1·2	18·6	15·4	17·0	19·3	11
Hazaribagh		65	130	[illegible]4	4	350	3,964	17,139	15,404	32,543	0·2	0·04	...	18·8	0·05	0·03	0·2	2·7	23·6	20·7	22·2	21·7	12
Ranchi		33	155	195	3	417	4,478	17,786	15,682	33,468	0·05	0·03	...	18·2	0·6	0·03	0·2	2·9	23·8	20·5	22·2	22·9	13
Palamau		21	74	93	3	212	3,075	12,450	11,378	23,828	0·02	1·0	...	24·4	0·01	0·004	0·3	3·8	30·9	28·2	29·5	27·1	14
Manbhum		21	229	92	6	400	2,470	17,358	13,648	31,006	0·08	0·3	...	15·4	0·04	0·1	0·2	1·4	19·1	16·1	17·6	18·1	15
Singhbhum		14	26	95	2	157	1,150	8,198	6,972	15,170	0·2	0·1	...	14·4	0·1	0·01	0·2	1·2	17·4	15·1	16·3	16·9	16
Total for the province		660	3,082	4,047	104	8,476	98,830	375,466	335,211	710,677	0·4	0·2	0·05	18·5	0·09	0·08	0·3	3·2	24·2	21·6	22·9	22·5	
TOWNS. PATNA DISTRICT.																							
Patna City		...	56	1	...	57	773	1,059	1,028	2,087	0·3	0·06	...	3·5	1·9	2·0	0·3	4·8	11·4	15·2	13·1	15·8	1
Bihar		...	2	..	...	2	208	217	176	393	0·1	0·2	...	3·8	0·4	0·2	0·04	4·4	8·8	7·8	8·3	8·0	2
Dinapore		1	4	1	...	6	68	1[illegible]8	133	271	0·3	0·1	...	5·5	1·4	0·6	0·2	2·8	11·2	11·2	11·2	1[illegible]·5	3
Barh	1	...	8	...	...	9	35	78	72	150	0·1	0·1	...	9·0	1·0	0·6	0·9	3·5	15·0	15·7	15·4	14·0	4
Khagole	1	1	7	...	...	9	36	76	57	133	0·4	0·3	...	9·8	0·8	0·5	1·2	4·8	18·4	17·3	17·9	10·8	5
GAYA DISTRICT.																							
Gaya	1	1	80	...	...	82	925	1,709	1,492	3,201	0·8	0·3	..	21·1	1·4	1·2	0·9	10·5	33·7	39·9	36·4	36·4	6
Tikari	...	...	...	...	...	...	20	41	43	83	...	0·7	...	10·6	0·2	...	...	3·6	15·2	15·0	15	23·5	7
Daudnagar	...	...	8	1	...	4	55	120	113	233	0·7	0·6	...	13.0	0·2	0·3	0·3	4·7	19·1	20·8	19·9	19·1	8

APPENDIX I—*contd.*

Annual Form No. VI.—Deaths registered from different causes in districts and towns of Bihar Province, during the year 1937—contd.

1	2	3			4			5			6	7	8	9	10
		Population according to census of 1931.			Births.			Birth rate.							
No.	Districts and Towns.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhœa.
	TOWNS—*contd.*														
	SHAHABAD DISTRICT.														
9	Arrah	26,635	22,287	48,922	282	214	496	5·7	4·4	10·1	2	17	...	141	5
10	Buxar	7,430	6,019	13,449	170	170	340	12·6	12·6	25·2	1	5	...	121	1
11	Dumraon ...	7,602	6,819	14,421	135	109	244	17·7	14·3	32·0	...	3	...	20	...
12	Jagadispur ...	4,791	4,870	9,661	90	73	162	18·7	15·0	33·8	...	2	...	41	...
13	Sasaram ...	12,473	12,702	25,175	279	204	543	22·3	21·1	43·5	...	16	...	170	4
14	Bhabhua ...	3,220	2,762	6,002	74	46	120	22·9	14·3	37·2	...	...	...	34	...
	SARAN DISTRICT.														
15	Chapra... ...	25,934	21,514	47,448	760	652	1,412	16·0	13·7	29·7	11	30	2	289	36
16	Revelganj ...	4,297	4,525	8,812	171	149	320	19·4	16·9	36·3	13	...	...	59	6
17	Siwan	7,981	6,234	14,215	248	220	468	17·4	15·5	32·9	1	1	11	67	1
	CHAMPARAN DISTRICT.														
18	Bettiah	14,659	13,282	27,941	562	501	1,063	20·1	17·9	38·0	...	64	45	269	6
19	Motihari ...	10,526	7,019	17,545	268	164	332	9·6	9·3	18·9	...	1	...	50	1
	MUZAFFARPUR DISTRICT.														
20	Muzaffarpur ...	25,050	17,999	43,046	507	468	975	11·8	10·8	22·6	18	2	1	233	36
21	Sitamarhi ...	6,255	4,446	10,701	138	134	272	12·9	12·5	25·4	...	...	...	118	8
22	Hajipur ...	9,936	9,363	19,299	369	313	682	19·1	16·2	35·3	38	1	1	146	25
23	Lalganj... ...	4,676	4,516	9,192	149	165	314	16·2	17·9	34·1	...	...	...	119	14
	DARBHANGA DISTRICT.														
24	Darbhanga ...	32,274	28,402	60,676	962	664	1,626	15·8	14·2	30·0	34	11	...	550	101
25	Roserah ...	4,533	4,336	8,869	168	95	263	18·9	10·7	29·6	6	...	...	17	3
26	Samastipur ...	6,101	3,790	9,891	144	130	274	14·6	13·1	27·7	3	...	...	80	4
27	Madhubani ...	9,946	8,843	18,789	276	211	487	14·7	11·2	25·9	10	...	...	108	15
	MONGHYR DISTRICT.														
28	Monghyr ...	27,843	25,020	52,863	783	651	1,434	14·8	12·3	27·1	17	33	...	289	21
29	Jamalpur ...	16,378	13,966	30,346	518	561	1,079	17·1	18·5	35·6	38	33	...	191	21
	BHAGALPUR DISTRICT.														
30	Bhagalpur ...	46,868	36,979	83,847	835	799	1,634	9·9	9·5	19·4	54	17	...	656	57
31	Colgong ...	2,632	2,601	5,233	88	57	145	16·8	10·9	27·7	10	...	...	72	3
	PURNEA DISTRICT.														
32	Purnea	9,255	6,219	15,474	113	96	209	7·3	6·2	13·5	7	1	...	195	34
33	Kishanganj ...	5,817	3,129	8,946	74	65	139	8·3	7·2	15·5	...	2	...	51	...
34	Katihar ...	9,014	6,850	15,864	83	58	141	5·2	3·7	8·9	...	1	...	36	1
35	Forbesganj ...	3,713	2,226	5,939	81	61	142	13·6	10·3	23·9	...	...	...	78	10

11						12	13			14												15
Injuries.							Total deaths from all causes.			Ratio of deaths per 1,000 of population.												
Suicide.																		From all causes.				
Male.	Female.	Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.	Total.	All other causes.	Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhœa.	Respiratory diseases.	Injuries.	All other causes.	Male.	Female.	Total.	Mean of previous five years.	No.
...	...	1	...	...	1	50	112	106	218	0·04	0·3	...	2·1	0·1	0·04	0·02	1·02	4·2	4·5	4·5	4·5	9
...	...	3	...	...	3	49	100	85	185	0·07	0·3	...	9·0	0·07	0·4	0·2	3·6	13·4	14·1	13·6	10·7	10
1	...	7	2	...	10	6	20	19	39	...	0·1	...	1·4	...	0·06	0·6	0·4	2·6	2·8	2·7	3·7	11
...	1	2	1	...	4	15	29	33	62	...	0·2	...	4·2	...	...	0·4	1·5	6·0	6·8	6·4	8·3	12
...	...	14	1	...	15	36	142	107	249	...	0·6	...	6·7	0·1	0·3	0·6	1·4	11·3	8·3	9·9	9·0	13
...	...	...	...	...	...	11	23	22	45	...	...	...	5·6	...	...	...	1·8	7·1	7·9	7·5	9·3	14
...	...	55	4	...	59	444	509	417	926	0·2	0·8	0·04	6·1	0·7	0·9	1·2	9·3	19·6	19·3	19·5	20·3	15
...	...	2	2	...	4	74	87	79	166	1·4	...	...	6·7	0·6	1·1	0·4	8·4	20·3	17·4	18·8	20·4	16
...	...	...	1	...	1	92	94	86	180	0·07	0·07	0·8	4·7	0·07	0·4	0·07	6·4	11·8	13·8	12·6	13·1	17
2	2	9	...	1	14	303	364	260	624	...	2·3	1·6	9·6	0·2	0·8	0·5	7·3	24·8	19·6	22·3	12·4	18
...	1	4	2	...	7	78	84	57	141	...	0·05	...	2·8	0·05	0·2	0·4	4·4	8·0	8·1	8·0	12·0	19
10	3	44	...	...	57	270	372	273	645	0·4	0·04	0·02	5·4	0·8	0·6	1·3	6·3	14·8	16·2	15·0	16·1	20
...	...	1	...	...	1	49	94	84	178	...	...	...	11·0	0·7	0·2	0·1	4·6	15·0	18·9	16·6	24·3	21
...	1	36	1	1	39	165	229	204	433	2·0	0·05	0·05	7·5	1·3	0·9	2·0	8·5	23·0	21·8	22·4	20·1	22
...	1	7	2	...	10	55	119	87	206	...	...	...	12·9	1·5	0·9	1·1	6·0	25·4	19·3	22·4	22·3	23
3	1	53	4	4	65	559	797	565	1,362	0·5	0·1	...	9·1	1·6	0·7	1·1	9·0	24·7	19·9	22·4	21·9	24
...	...	...	...	...	...	54	42	39	81	0·7	...	...	1·9	0·3	0·1	...	6·1	9·2	9·0	9·1	16·1	25
...	...	3	...	.	3	70	62	54	116	0·3	.	...	8·0	0·4	0·6	0·3	7·1	10·1	14·2	11·7	11·8	26
1	...	13	...	4	18	94	130	109	248	0·5	...	...	5·7	0·8	0·1	0·9	5·0	14·0	13·3	13·2	12·0	27
...	...	...	2	...	2	337	389	332	721	0·3	0·6	...	5·5	0·4	0·4	0·04	6·4	14·0	13·2	13·6	13·0	28
...	...	7	3	...	10	224	270	266	536	1·2	1·1	...	6·3	0·7	0·6	0·3	7·4	16·5	19·0	17·7	17·0	29
5	7	26	10	...	48	403	726	553	1,279	0·6	0·2	...	7·8	0·6	0·5	0·5	4·8	15·4	14·9	15·2	19·4	30
...	1	...	6	...	7	27	71	56	127	1·9	...	...	13·7	0·5	1·5	1·3	5·1	26·9	21·5	24·2	19·7	31
...	...	12	2	...	14	23	153	133	286	0·4	0·06	...	12·6	2·2	0·5	0·9	1·4	16·5	21·4	18·5	13·6	32
...	...	...	...	...	...	12	40	28	68	..	0·2	...	5·7	...	0·3	...	1·3	6·9	8·8	7·6	8·5	33
...	...	1	...	...	1	16	28	33	60	...	0·06	...	3·3	0·06	0·3	0·08	1·0	3·1	4·7	3·8	3·9	34
...	...	1	...	...	[illegible]	[illegible]	[illegible]	[illegible]	99	...	...	...	13·1	1·7	0·9	0·2	1·3	14·8	19·8	16·7	15·3	35

A[illegible]IX I—*contd.*

Annual Form No. VI.—Deaths registered from different causes [illegible]stricts and towns of Bihar and Orissa Province, during the year 1937—concld.

1	2	3			4			5			6	7	8	9	10
No.	District and Town.	Population according to census of 1931. Male.	Female.	Total.	Births. Male.	Female.	Total.	Birth rate. Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.
	TOWNS—*concld.*														
	SANTAL PARGANAS DISTRICT.														
36	Sahibganj ...	8,530	7,353	15,883	84	62	146	5·3	3·9	9·2	...	...	...	24	...
37	Deoghar ...	8,117	6,100	14,217	61	39	100	4·3	2·9	7·0	8	17	..	50	2
38	Dumka	5,317	4,154	9,471	39	32	71	4·1	3·4	7·5	...	7	...	18	1
39	Madhupur ...	4,997	3,968	8,965	57	43	100	6·3	4·8	11·1	...	...	...	34	...
	HAZARIBAGH DISTRICT.														
40	Hazaribagh ...	10,903	10,074	20,977	185	168	353	8·8	8·0	16·8	...	...	—	157	4
41	Chatra	4,312	4,446	8,758	138	155	293	15·7	17·7	33·4	...	15	...	125	1
42	Giridih	11,122	10,000	21,122	147	123	270	6·9	5·8	12·7	1	...	...	83	4
	RANCHI DISTRICT.														
43	Ranchi	26,918	23,599	50,517	396	355	751	7·8	7·0	14·8	...	1	...	196	46
44	Lohardaga ...	3,816	3,761	7,577	113	85	198	14·9	11·2	26·1	...	...	...	51	8
	PALAMAU DISTRICT.														
45	Daltonganj ...	6,601	5,439	12,040	103	106	209	8·6	8·8	17·4	...	10	...	48	3
	MANBHUM DISTRICT.														
46	Purulia	14,388	11,586	25,974	248	224	472	9·5	8·6	18·1	...	9	...	194	7
47	Raghunathpur ..	3,654	3,485	7,139	122	79	201	17·1	11·0	28·1	...	37	...	123	...
48	Jhalda	3,470	3,454	6,924	88	66	154	12·7	9·5	22·2	...	4	...	74	...
49	Dhanbad ...	9,882	6,476	16,356	229	283	512	14·0	17·3	31·3	...	...	...	57	15
	SINGHBHUM DISTRICT.														
50	Chaibassa ...	5,716	5,069	10,785	137	109	246	12·7	10·1	22·8	...	3	...	87	7
51	Chakradharpur ..	6,215	4,976	11,191	75	71	146	6·7	6·3	13·0	...	...	...	39	1
52	Jugsalai ...	5,075	3,646	8,721	130	85	215	14·9	9·7	24·6	...	...	...	37	...
53	Jamshedpur ...	51,137	32,601	83,738	182	113	295	2·2	1·3	3·5	1	...	...	168	9
(a)	Total for all Towns	733,983	592,193	1,326,176	14,535	13,026	27,561	11·0	9·8	20·8	427	414	60	8,778	1,024
(a)	Total for the whole Province.	16,238,978	16,122,239	32,361,217	564,117	536,291	1,100,408	17·4	16·5	34·0	13,948	7,485	1,470	584,7[illegible]8	4,000

(a) Excluding cantonment population.

No.	District and Town.	11 Injuries. Suicide. Male.	Female.	Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.	Total.	12 All other causes.	13 Total deaths from all causes. Male.	Female.	Total.	14 Ratio of deaths per 1,000 of population. Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes. Male.	Female.	Total.	Mean of previous five years.	15 No.
36	Sahibganj		...	4	...	...	4	9	19	20	39	...	...	...	1·5	...	0·1	0·3	0·6	2·2	2·7	2·5	3·5	36
37	Deoghar		...	2	...	...	3	22	69	37	106	0·5	1·2	...	3·5	0·1	0·3	0·2	1·5	8·5	6·1	7·4	4·4	37
38	Dumka		...	...	1	...	1	4	22	14	36	...	...	...	1·9	0·1	0·5	0·1	0·4	4·1	3·3	3·8	4·4	38
39	Madhupur		...	1	...	...	1	11	28	18	46	...	...	...	3·8	...	..	0·1	1·2	5·6	4·5	5·1	4·2	39
40	Hazaribagh		...	7	1	...	8	16	97	93	190	...	...	—	7·5	0·2	0·2	0·3	0·7	8·8	9·2	9·0	9·6	40
41	Chatra		...	...	...	...	...	31	101	76	177	...	1·7	...	14·3	0·1	0·5	...	3·5	23·4	17·1	20·2	10·8	41
42	Giridih		...	2	...	...	2	18	57	51	108	0·04	...	...	3·8	0·2	0·04	...	0·8	5·1	5·1	5·1	5·1	42
43	Ranchi		1	4	..	1	8	217	297	185	482	...	0·02	...	3·8	0·9	0·2	0·1	4·2	11·0	7·8	9·5	4·9	43
44	Lohardaga		...	1	...	...	1	24	47	39	86	...	...	...	6·7	1·0	0·2	0·1	3·1	12·3	10·3	11·3	17·5	44
45	Daltonganj		...	...	...	...	...	8	43	27	69	...	0·8	...	4·0	0·2	...	...	0·7	6·4	5·0	5·7	6·0	45
46	Purulia		1	3	...	...	6	31	153	103	256	...	0·3	...	7·5	0·3	0·3	0·2	1·2	10·6	8·9	9·8	11·0	46
47	Raghunathpur		...	...	...	...	...	8	104	65	169	...	5·2	-	17·2	...	0·1	...	1·1	28·4	18·6	23·6	17·3	47
48	Jhalda		...	...	...	...	...	2	37	43	80	...	0·5	...	10·6	...	...	...	0·3	10·7	12·4	11·5	16·6	48
49	Dhanbad		1	17	1	1	22	115	132	94	226	...	...	...	3·4	0·9	1·0	1·3	7·0	13·3	14·5	13·8	13·7	49
50	Chaibassa		...	8	...	...	8	45	85	66	151	...	0·2	...	8·0	0·6	0·2	0·7	4·1	14·8	13·0	14·0	17·3	50
51	Chakradharpur		...	1	...	...	1	37	43	38	81	...	...	...	3·4	0·1	0·3	0·1	3·3	6·9	7·7	7·2	8·8	51
52	Jugsalai		3	3	..	...	6	6	23	26	49	...	...	...	4·2	...	...	0·7	0·7	4·5	7·1	5·6	6·3	52
53	Jamshedpur		3	28	1	...	40	175	252	141	393	0·01	...	...	2·0	0·2	..	0·4	2·1	4·9	4·3	4·7	4·1	53
(a)	Total for all Towns		30	542	[illegible]	12	674	6,323	10,196	8,379	18,575	0·3	0·3	0·04	6·6	0·8	0·7	0·5	4·8	13·9	11·4	14·0	13·8	...
(a)	Total for the whole Province.		690	3,604	4,097	116	9,150	105,142	385,662	343,590	729,253	0·4	0·2	0·04	18·0	0·1	0·1	0·3	3·2	23·8	21·3	22·5	22·1	...

APPENDIX TO AN[illegible] FORM No. VI.

Births and Deaths registered in the cantonment[illegible] *Bihar Province, during the year 1937.*

1	2	3			4						5	6	7	8	9	10
No.	Name of cantonment.	Indian non-military population according to Census of 1931.			Births.			Birth-rate.								
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	[illegible]
1	Dinapur	5,909	4,308	10,217	126	123	249	12·3	12·0	24·3	1	...	...	115	6	[illegible]

1	11						12	13			14											15
No.	Injuries.						All other causes.	Total deaths from all causes.			Ratio of deaths per 1,000 of population.								All causes.			No.
	Suicide.		Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.	Total.																
	Male.	Female.						Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	Male.	Female.	Total.	
1	...	...	...	...	...	...	73	93	109	202	0·1	...	...	11·2	0·5	0·7	...	7·1	15·7	16·3	19·7	1

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ANNUAL F[illegible] No. VI(a)

Deaths registered from different kinds of fe[illegible] dysentery, diarrhoea, respiratory diseases and other causes.

Municipalities.	Malaria.	Enteric Fever.	Measles.	Relapsing Fever (Spirochaetal).	Kala Azar.	Influenza.	Cerebrospinal Fever.	Thypus Fever.	Blackwater Fever.	Other Fevers.	Dysentery.	[illegible]	Pneumonia.	Pulmonary Tuberculosis.	Hooping cough.	Other respiratory diseases.	Beri-beri.	Acute poliomyelitis.	Diptheria.	Chickenpox.	Mumps.	Tuberculosis of joints.	Other tubercular diseases.	Leprosy.	Cancer.	Deaths from child-birth.	Deaths under one year.	Infantile mortality rate per 1,000 births.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
PATNA DISTRICT.																												
Patna City	101	64	3	...	...	...	...	...	...	339	252	...	157	165	5	...	...	...	...	1	...	...	7	4	29	6	370	156·2
Bihar	...	...	...	...	...	...	...	...	...	183	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	108	146·3
Dinapore	...	...	...	...	...	...	...	...	...	141	...	...	...	...	...	15	...	...	...	...	...	...	...	...	...	...	58	133·8
Barh	...	...	...	...	...	...	...	...	...	88	10	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	33	135·2
Khagole	...	...	...	...	...	...	...	...	...	73	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	42	257·6
GAYA DISTRICT.																												
Gaya	...	...	...	...	...	...	...	...	...	1,862	121	...	...	...	67	39	...	...	...	7	...	...	...	...	...	117	763	291·0
Tikari	...	...	...	...	...	...	...	...	...	58	1	...	...	...	...	...	...	...	...	2	...	...	...	...	...	11	22	89·4
Daudnagar	3	...	...	...	...	...	...	...	...	152	3	...	...	...	...	4	...	...	...	5	...	...	...	...	...	6	72	155·8
SHAHABAD DISTRICT.																												
Arrah	...	...	...	...	...	...	...	...	...	141	5	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	39	78·6
Buxar	...	...	...	...	...	...	...	...	...	121	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	61	179·4
Dumraon	...	...	...	...	...	...	...	...	...	20	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	7	28·7
Jagdishpur	...	...	...	...	...	...	...	...	...	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	20	123·4
Sasaram	...	...	...	...	...	...	...	...	...	170	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	...	57	105·0
Bhabua	...	...	...	...	...	...	...	...	...	34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13	108·4
CHAMPARAN DISTRICT.																												
Bettiah	...	...	...	...	...	...	...	...	...	269	1	...	...	...	...	23	...	...	...	...	...	...	...	...	...	...	74	69·6
Motihari	...	...	...	...	...	...	...	...	...	50	1	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	32	96·3
MUZAFFARPUR DISTRICT.																												
Muzaffarpur	...	...	...	...	...	...	...	...	...	232	16	...	...	...	11	17	...	...	...	6	...	...	...	...	9	21	152	155·9
Hajipur	...	...	...	...	...	1	...	...	...	146	...	...	...	...	1	17	...	...	...	1	...	...	...	...	...	2	96	140·7
Lalganj	41	...	...	...	...	...	...	1	...	78	14	...	...	...	...	8	...	...	...	...	...	...	16	...	...	3	58	184·4
Sitamarhi	...	...	...	...	...	...	...	...	...	118	4	...	...	...	1	1	...	...	...	...	...	...	5	...	...	...	51	187·5
MONGHYR DISTRICT.																												
Monghyr	7	6	...	...	...	...	...	...	...	247	10	...	11	3	9	...	...	...	...	38	...	...	77	...	...	10	168	117·2
Jamalpur	...	...	...	...	...	...	...	...	...	101	6	...	5	2	2	10	...	...	...	21	...	...	...	...	...	...	116	107·5
PURNEA DISTRICT.																												
Purnea	165	...	5	...	8	16	...	5	...	6	22	...	2	...	3	8	...	...	...	...	...	...	...	...	...	...	30	143·5
Katihar	27	...	1	...	...	...	...	...	...	1	1	...	...	...	...	5	1	...	...	...	...	...	...	...	...	...	16	113·4
Kishanganj	44	...	1	...	...	1	...	2	...	...	...	...	...	...	...	3	...	...	...	2	...	...	...	...	...	...	18	129·5
Forbesganj	75	...	...	...	1	4	...	2	2	...	4	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	17	119·7
SANTAL PARGANAS.																												
Sahibganj	...	...	...	...	...	1	1	3	...	24	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	9	61·6
Deoghar	45	...	...	...	...	2	...	1	...	4	...	...	1	...	...	1	...	...	...	5	...	...	5	...	...	1	12	120·0
Dumka	3	...	...	...	1	...	...	...	...	15	1	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	6	84·5
Madhupur	...	...	...	...	...	...	...	...	...	34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	80·0
RANCHI DISTRICT.																												
Ranchi	4	...	...	...	...	...	...	...	...	196	43	...	11	...	...	3	...	...	1	1	...	...	15	...	1	1	52	69·2
Lohardaga	...	...	...	...	...	...	...	...	...	51	8	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	23	116·2
MANBHUM DISTRICT.																												
Purulia	...	46	...	...	...	...	...	...	...	130	6	...	...	...	...	9	...	...	...	9	...	...	...	...	...	1	47	99·6
Jhalda	33	...	...	...	...	...	...	...	...	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	78·0
Raghunathpur	1	...	...	...	...	1	28	...	...	122	...	...	...	...	...	1	...	...	...	10	...	...	1	...	...	...	37	184·0
Dhanbad	5	1	...	...	...	...	...	...	...	45	12	...	9	1	...	7	...	...	...	...	...	...	...	...	1	5	29	56·6
SINGHBHUM DISTRICT.																												
Chaibassa	...	...	...	...	...	...	...	6	...	87	5	...	...	...	2	...	...	...	...	2	...	...	...	...	...	1	32	130·8
Chakradharpur	...	...	...	...	...	...	...	...	...	39	1	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	20	137·0
Jugsalai	...	...	...	...	...	...	...	...	...	37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	69·8
Jamshedpur	...	...	...	...	...	...	...	...	...	168	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27	91·5
SARAN DISTRICT.																												
Chapra	...	...	...	...	3	...	...	...	...	284	17	...	14	25	...	7	...	...	...	...	...	...	...	1	...	6	177	125·4
Revilganj	...	...	...	...	...	...	...	2	...	59	...	...	...	...	...	10	...	...	1	...	...	...	...	...	...	...	40	125·0
Siwan	...	...	...	...	...	...	...	...	...	67	...	...	...	...	6	...	...	...	...	...	...	...	...	24	...	...	37	179·5

No. VI(*a*)—*concld.*

ANNUAL F…

Deaths registered from different kinds of f… dysentery, diarrhoea, respiratory diseases and other causes—concld.

Municipalities.	Malaria.	Enteric Fever.	Measles.	Relapsing Fever (Spirochaetal).	Kala Azar.	Influenza.	Cerebrospinal Fever.	Thypus Fever.	Blackwater Fever.	Other Fevers.	Dysentry.	Pneumonia.	Pulmonary Tuberculosis.	Hooping cough.	Other respiratory diseases.	Beri-beri.	Acute poliomyelitis.	Diptheria.	Chickenpox.	Mumps.	Tuberculosis of joints.	Other tubercular diseases.	Leprosy.	Cancer.	Deaths from child-birth.	Deaths under one year.	Infantile mortality rate per 1,000 births.
1	2	3	4	5	6	7	8	6	10	11	12	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
DARBHANGA DISTRICT.																											
Darbhanga	377	...	...	...	12	80	...	...	...	131	53	6	...	36	...	...	...	...	2	...	...	...	...	...	...	207	113·3
Samastipur	...	...	...	...	...	...	...	...	...	30	2	...	...	...	6	...	...	...	...	...	...	...	...	...	1	26	95·0
Madhubani	108	...	...	...	...	...	...	...	...	...	13	...	...	...	3	...	...	...	1	...	...	...	...	...	...	45	92·4
Roserah	...	2	...	...	...	...	...	...	...	15	2	...	...	1	1	...	...	...	...	...	...	...	...	...	2	16	60·9
PALAMAU DISTRICT.																											
Daltonganj	45	...	...	...	...	...	...	2	...	1	3	...	...	...	...	...	...	...	9	...	...	...	...	...	...	32	105·2
HAZARIBAGH DISTRICT.																											
Hazaribagh	1	...	...	1	...	...	...	3	...	152	4	...	...	...	5	...	...	...	...	...	...	...	...	...	1	26	73·6
Chapra	72	...	...	...	...	...	...	...	...	53	1	...	...	...	5	...	...	...	...	...	...	...	...	...	...	34	116·0
Giridih	...	...	...	...		...	...	...	...	82	4	...	...	1	...	...	...	...	...	...	...	...	...	1	...	19	70·4
BHAGALPUR DISTRICT.																											
Bhagalpur	...	...	...	...	...	...	...	...	...	656	30	...	...	...	44	...	...	...	...	...	...	...	...	...	...	267	163·4
Colgong	...	...	...	...	...	...	...	...	...	72	...	...	...	...	8	...	...	...	...	...	...	...	...	...	...	33	227·6

APPENDIX I—*contd.*

Annual Form No. VII.—Deaths registered from Cholera in Districts of Bihar Province, during each month of the year 1936.

1	2	3		4														6			7			8	1
		Circles of registration.		Villages.														Total.			Ratio of deaths per 1,000 of population.				
No.	District.	Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.	Mean ratio per 1,000 of previous five years.	No.
	PATNA DIVISION.																								
1	Patna ...	20	20	2,315	353	1	1	3	33	20	89		98	52	271	386	112	596	617	1,213	0·6	0·6	0·6	0·6	1
2	Gaya ...	16	15	6,058	420	1	...	6	23	48	95		227	232	256	197	75	777	708	1,485	0·6	0·6	0·6	1·4	2
3	Shahabad ...	17	11	4,735	67	1	...	...	4	10	12		5	5	42	102	31	107	109	216	0·1	0·1	0·1	0·8	3
	Total ...	53	46	13,108	840	3	1	9	60	78	196		330	289	569	685	218	1,480	1,434	2,914	0·5	0·5	0·5	1·0	
	TIRHUT DIVISION.																								
4	Saran ...	13	13	4,305	84	...	...	...	7	18	4		2	7	36	98	87	159	106	265	0·1	0·08	0·1	0·1	4
5	Champaran ...	11	8	2,546	23	...	...	...	2	12	3		...	7	...	3	12	20	20	40	0·01	0·01	0·01	1·0	5
6	Muzaffarpur ...	14	12	4,059	290	...	...	30	20	311	304		28	121	253	467	238	934	937	1,871	0·6	0·6	0·6	0·4	6
7	Darbhanga ...	14	14	3,135	480	...	...	75	92	93	110		9	10	62	619	362	740	736	1,476	0·5	0·5	0·5	0·5	7
	Total ...	52	47	14,047	877	...	...	105	121	434	421		89	145	351	1,187	699	1,853	1,799	3,652	0·3	0·3	0·3	0·5	
	BHAGALPUR DIVISION.																								
8	Monghyr ...	13	13	2,610	470	...	...	15	58	151	380		196	139	605	568	70	1,164	1,251	2,415	1·0	1·1	1·0	1·1	8
9	Bhagalpur ...	14	14	3,080	280	10	...	19	64	14	35		116	124	722	1,108	401	1,350	1,382	2,732	1·2	1·2	1·2	1·0	9
10	Purnea ...	17	9	4,160	115	6	...	36	37	7	12		...	4	76	54	12	136	108	244	0·1	0·1	0·1	0·5	10
11	Santal Parganas ...	10		10,160	323	1	4	1	17	20	108		457	79	116	144	31	645	590	1,235	0·6	0·6	0·6	0·8	11
	Total ...	54	43	20,010	1,188	17	4	71	176	192	535		771	346	1,591	1,874	514	3,295	3,331	6,626	0·7	0·8	0·7	1·0	
	CHOTA NAGPUR DIVISION.																								
12	Hazaribagh ...	21	12	6,087	67	2	...	...	...	31	72		33	6	85	30	5	191	150	341	0·2	0·2	0·2	0·9	12
13	Ranchi ...	32	9	3,838	45	...	...	...	...	...	1		5	3	4	...	...	26	25	51	0·03	0·03	0·03	0·3	13
14	Palamau ...	10	5	3,134	18	...	...	1	...	...	...		9	5	1	...	...	14	6	20	0·03	0·01	0·02	0·9	14
15	Manbhum ...	35	20	4,642	54	...	...	40	8	23	1		2	33	13	2	...	81	67	148	0·06	0·07	0·08	0·7	15
16	Singhbhum ...	13	7	3,013	49	...	20	...	...	162	20		...	...	...	...	...	94	103	197	0·2	0·2	0·2	0·1	16
	Total ...	111	53	20,714	233	2	20	41	8	216	94		49	47	103	32	5	406	351	757	0·1	0·1	0·1	0·6	
	Total for the Province ...	270	189	67,879	3,138	22	25	226	365	920	1,246		1,199	827	2,542	3,778	1,436	7,034	6,915	13,949	0·4	0·4	0·4	0·7	

APPENDIX I—*contd.*

Annual Form No. VIII.—Deaths registered from small-pox in the districts of Bihar Province, during each month of the year 1937.

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	District.	Number in each district.	Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-pox were reported.	January.	February.	March.	April.	May.	June.
	PATNA DIVISION.										
1	Patna	20	19	2,315	207	49	71	56	118	64	54
2	Gaya	16	15	6,058	331	67	136	140	150	171	[illegible]
3	Shahabad	17	17	4,735	272	38	126	116	128	130	64
	Total ...	53	51	13,108	810	154	333	312	396	365	246
	TIRHUT DIVISION.										
4	Saran	13	12	4,315	283	34	28	27	97	136	150
5	Champaran	11	10	2,548	65	8	9	10	31	130	80
6	Muzaffarpur	14	12	4,059	28	11	5	3	10	16	23
7	Darbhanga	14	11	3,135	89	14	34	12	31	76	54
	Total ...	52	45	14,047	465	67	76	52	169	358	[illegible]
	BHAGALPUR DIVISION.										
8	Monghyr	13	13	2,610	230	21	43	23	62	132	89
9	Bhagalpur	14	11	3,080	110	34	27	51	63	86	51
10	Purnea	17	13	4,160	155	14	30	26	57	71	49
11	Santal Parganas ...	10	8	10,160	434	65	67	88	128	95	95
	Total ...	54	45	20,010	929	134	167	188	310	384	284
	CHOTA NAGPUR DIVISION										
12	Hazaribagh	21	8	6,087	50	4	6	4	5	11	24
13	Ranchi	32	7	3,838	33	4	4	3	12	8	4
14	Palamau	10	8	3,134	340	21	91	133	139	168	117
15	Manbhum	35	28	4,642	263	75	103	83	139	118	58
16	Singhbhum	13	6	3,013	52	15	14	22	20	21	15
	Total ...	111	57	20,714	738	119	218	244	315	326	216
	Total for the Province ...	270	198	67,879	2,942	474	794	796	1,190	1,433	[illegible]

		5						6			7		8			9	1
								Total.			Number of deaths among children.		Ratio of deaths per 1,000 of population.				
No.	District.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Under 1 year.	One year and under 10 years.	Male.	Female.	Total.	Mean ratio per 1,000 of previous five years.	No.
	PATNA DIVISION.																
1	Patna	60	20	5	4	16	17	246	288	534	34	92	0·2	0·3	0·3	0·5	1
2	Gaya	75	38	19	27	40	83	518	556	1,074	61	114	0·4	0·5	0·4	1·0	2
3	Shahabad	49	26	4	14	25	22	355	389	744	79	169	0·4	0·4	0·4	1·0	3
	Total	184	86	28	45	81	182	1,119	1,233	2,352	174	375	0·3	0·4	0·4	0·8	
	TIRHUT DIVISION.																
4	Saran	108	27	18	21	54	93	408	385	793	46	152	0·3	0·2	0·3	0·7	4
5	Champaran	37	20	3	...	3	28	173	186	359	78	104	0·2	0·2	0·2	0·5	5
6	Muzaffarpur	...	1	5	...	9	16	57	42	99	1	...	0·03	0·02	0·03	0·3	6
7	Darbhanga	3	14	2	3	9	17	131	138	269	10	7	0·08	0·08	0·08	0·3	7
	Total	148	62	28	24	75	154	769	751	1,520	135	263	0·1	0·1	0·1	0·4	
	BHAGALPUR DIVISION.																
8	Monghyr	48	11	4	2	16	5	234	222	456	87	115	0·2	0·2	0·2	0·9	8
9	Bhagalpur	27	19	12	1	6	21	202	196	398	...	...	0·2	0·2	0·2	0·7	9
10	Purnea	29	14	2	2	...	2	154	142	296	...	...	0·1	0·1	0·1	1·6	10
11	Santal Parganas	55	18	23	5	5	5	380	269	649	22	30	0·4	0·3	0·3	0·6	11
	Total	159	62	41	10	27	33	970	829	1,799	109	145	0·2	0·2	0·2	0·9	
	CHOTA NAGPUR DIVISION																
12	Hazaribagh	16	6	...	...	...	...	40	36	76	7	6	0·04	0·05	0·05	0·5	12
13	Ranchi	2	1	1	7	...	3	27	22	49	...	...	0·03	0·02	0·03	0·2	13
14	Palamau	60	26	17	10	10	49	447	394	841	...	...	1·1	1·0	1·0	0·5	14
15	Manbhum	20	17	5	7	26	55	396	309	705	32	8	0·4	0·3	0·4	0·2	15
16	Singhbhum	31	5	1	1	...	...	80	63	143	1	1	0·2	0·1	0·2	0·4	16
	Total	129	55	24	25	36	107	990	824	1,814	40	15	0·3	0·2	0·3	0·4	
	Total for the Province	620	265	121	104	219	416	3,848	3,637	7,485	458	798	0·2	0·2	0·2	0·6	

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APPENDIX I—*contd.*

Annual Form No. IX.—Deaths registered from Fevers in the districts of Bihar Province, during each month of the year 1937.

1	2	3		4		5												6			7			8	1
No.	District.	Circles of Registration.		Villages.														Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
		Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.		
	PATNA DIVISION.																								
1	Patna	20	20	2,315	2,270	1,419	1,349	1,510	1,793	1,774	2,514	2,421	2,175	2,450	2,401	2,498	2,415	12,243	12,476	24,719	12·8	14·0	13·3	11·9	1
2	Gaya	16	10	6,058	6,025	2,389	2,521	2,460	3,322	3,712	4,632	4,735	5,295	5,028	4,881	4,487	4,569	24,465	23,566	48,031	20·5	19·7	20·1	19·0	2
3	Shahabad	17	17	4,735	4,652	1,476	1,905	1,911	2,410	2,684	3,805	2,979	3,900	3,641	3,557	3,226	3,798	17,210	17,573	34,783	17·2	18·0	17·4	16·2	3
	Total ...	53	53	13,108	12,947	5,284	5,775	5,881	7,525	8,170	10,451	10,126	11,370	11,119	10,839	10,211	10,782	53,918	53,615	107,533	17·1	17·4	17·3	16·0	
	TIRHUT DIVISION.																								
4	Saran	13	13	4,305	4,250	1,912	2,171	1,955	2,178	2,739	2,491	2,749	2,251	2,372	2,305	2,433	2,636	15,320	12,872	28,192	12·5	10·2	11·3	10·9	4
5	Champaran	11	11	2,548	2,490	3,268	2,383	2,559	2,315	3,004	3,145	2,693	2,415	2,490	2,582	2,758	3,374	18,005	14,980	32,985	16·6	14·0	15·4	16·5	5
6	Muzaffarpur	14	14	4,059	4,030	4,289	3,867	4,485	5,571	5,872	5,148	4,376	3,594	4,266	4,341	6,253	5,775	30,658	27,179	57,837	21·2	18·2	19·7	19·5	6
7	Darbhanga	14	14	3,135	3,029	4,063	5,795	5,510	6,780	5,979	5,180	4,135	3,627	4,657	4,882	6,056	7,133	34,328	29,539	63,867	21·8	18·5	20·2	17·5	7
	Total ...	52	52	14,047	13,799	13,532	14,216	14,509	16,844	17,594	15,964	13,957	11,957	13,785	14,110	17,500	18,918	98,311	84,570	182,881	18·5	15·6	17·0	16·5	
	BHAGALPUR DIVISION.																								
8	Monghyr	13	13	2,610	2,520	2,460	2,371	2,630	3,127	3,022	2,785	2,899	2,786	3,282	4,185	4,065	3,974	19,373	18,213	37,586	16·9	15·9	16·4	16·8	8
9	Bhagalpur	14	14	3,080	3,020	4,718	5,059	4,554	5,265	4,686	4,201	3,368	2,580	3,692	4,316	4,411	4,876	27,272	24,454	51,726	24·1	22·1	23·1	18·5	9
10	Purnea	17	17	4,160	4,076	5,623	5,562	4,960	5,844	5,702	4,654	4,057	3,806	4,309	3,841	5,221	5,551	31,478	27,652	59,130	27·9	26·2	27·0	20·6	10
11	Santal Parganas	10	10	10,160	8,526	2,386	1,997	1,945	2,537	2,729	2,620	2,491	2,355	2,750	2,427	2,557	2,469	15,895	13,368	29,263	15·4	13·1	14·3	15·9	11
	Total ...	54	54	20,010	18,142	15,187	14,989	14,089	16,773	16,139	14,260	12,815	11,527	14,033	14,769	16,254	16,870	94,018	83,687	177,705	20·3	19·3	20·3	18·0	
	CHOTA NAGPUR DIVISION.																								
12	Hazaribagh	21	21	6,087	5,290	2,069	1,983	1,787	2,259	2,428	2,521	2,283	2,744	2,364	2,577	2,546	2,547	14,618	13,440	28,058	19·5	17·5	18·4	16·9	12
13	Ranchi	32	32	3,838	3,730	1,498	1,827	2,126	2,006	2,304	2,239	2,113	3,283	3,076	2,824	2,486	1,909	14,687	13,004	27,671	18·8	16·4	17·7	18·0	13
14	Palamau	10	10	3,134	2,910	1,347	1,282	1,233	1,452	1,351	1,920	1,476	1,968	1,926	1,902	2,034	1,836	10,215	9,512	19,727	24·9	23·2	24·0	21·0	14
15	Manbhum	35	35	4,642	4,420	2,271	2,110	2,108	2,284	2,460	2,286	2,197	2,594	2,507	2,394	1,968	2,323	15,203	12,299	27,502	16·2	14·1	15·0	15·4	15
16	Singhbhum	13	13	3,013	2,950	1,113	1,024	1,077	1,060	1,034	913	1,155	1,336	1,166	1,175	1,301	1,422	7,462	6,314	13,776	18·5	15·2	16·9	13·0	16
	Total ...	111	111	20,714	19,300	8,298	8,226	8,331	9,061	9,577	9,879	9,174	11,925	11,039	10,872	10,335	10,037	62,185	54,569	116,754	18·6	16·5	17·6	16·7	
	Total for Province ...	270	270	67,879	64,188	42,301	43,206	42,810	50,203	51,480	50,554	46,067	46,779	49,976	50,590	54,300	56,607	308,432	276,441	584,873	19·0	17·1	18·1	16·9	

APPENDIX I—*contd.*

Annual Form No. X.—Deaths registered from Dysentery and Diarrhœa in the districts of Bihar Province, during each month of the year 1937.

1	2	3		4		5												6			7			8	1
No.	District.	Circles of Registration.		Villages.														Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
		Number in each district.	Number from which deaths from Dysentery and Diarrhœa were reported.	Number in each district.	Number from which deaths from Dysentery and Diarrhœa were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.		
	PATNA DIVISION.																								
1	Patna	20	20	2,315	424	55	53	47	78	79	101	139	120	113	156	134	111	626	560	1,186	0·6	0·6	0·6	0·4	1
2	Gaya	13	14	6,058	190	8	9	28	8	13	13	21	25	33	24	32	30	133	111	244	0·1	0·1	0·1	0·09	2
3	Shahabad	17	8	4,735	10	4	1	3	5	4	...	1	...	6	6	1	1	18	14	32	0·02	0·01	0·02	0·03	3
	Total ...	53	42	13,108	624	67	63	78	91	96	114	161	145	152	186	167	142	777	685	1,462	0·2	0·2	0·2	0·2	
	TIRHUT DIVISION.																								
4	Saran	13	13	4,305	111	10	9	18	23	30	27	18	27	14	30	12	26	150	94	214	0·1	0·07	0·1	0·1	4
5	Champaran	11	7	2,548	15	3	3	1	1	6	1	1	...	...	2	1	3	12	10	22	0·01	0·009	0·01	0·01	5
6	Muzaffarpur ..	14	14	4,059	33	8	1	14	17	10	11	9	13	5	12	14	13	82	45	127	0·05	0·03	0·04	0·05	6
7	Darbhanga	14	11	3,135	155	140	66	35	65	24	16	10	4	9	18	14	12	300	113	413	0·2	0·07	0·1	0·06	7
	Total ...	52	45	14,047	314	161	79	68	106	70	55	38	44	28	62	41	54	544	262	806	0·1	0·05	0·07	0·06	
	BHAGALPUR DIVISION.																								
8	Monghyr	13	10	2,610	47	9	...	10	11	7	2	9	9	14	18	6	9	49	55	104	0·04	0·05	0·04	0·06	8
9	Bhagalpur	14	10	3,080	45	3	10	9	7	20	9	17	8	9	12	10	9	81	37	118	0·07	0·03	0·04	0·04	9
10	Purnea	17	13	4,160	39	4	10	14	16	11	12	7	4	2	1	2	4	67	20	87	0·06	0·02	0·04	0·03	10
11	Santal Parganas ...	10	9	10,160	45	9	1	10	6	8	5	13	22	6	12	4	...	61	35	96	0·06	0·03	0·04	0·09	11
	Total ...	54	42	20,010	176	25	21	43	40	46	28	46	38	31	43	22	22	258	147	405	0·05	0·03	0·05	0·05	
	CHOTA NAGPUR DIVISION.																								
12	Hazaribagh	21	15	6,087	47	2	5	8	2	9	2	19	13	7	11	7	10	58	37	95	0·07	0·04	0·06	0·04	12
13	Ranchi	32	29	3,838	592	39	37	48	42	33	78	133	255	187	97	58	26	600	433	1,033	0·7	0·5	0·7	0·6	13
14	Palamau	10	7	3,134	7	...	...	1	...	2	1	2	2	1	1	...	1	8	3	11	0·0[illegible]	0·007	0·01	0·03	14
15	Manbhum	35	14	4,642	55	6	4	8	7	9	9	10	13	20	10	4	6	60	46	106	0·06	0·05	0·05	0·08	15
16	Singhbhum	13	7	3,013	19	1	...	...	3	25	8	16	7	24	1	3	...	53	35	88	0·1	0·1	0·1	0·04	16
	Total ...	111	72	20,714	720	48	46	65	54	78	98	180	290	239	120	72	43	779	554	1,333	0·1	0·2	0·2	0·2	
	Total for the Province	270	201	67,879	1,834	301	209	254	291	190	295	425	517	450	411	302	261	2,358	1,648	4,006	0·1	0·1	0·1	0·1	

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APPENDIX I—*contd.*

Annual Form No. XI.—Deaths registered from Respiratory diseases in the Districts of Bihar Province, during each month of the year 1937.

1	2	3		4		5												6			7			8	1
		Circles of Registration.		Villages.														Total.			Ratio of deaths per 1,000 of population.				
No.	District.	Number in each district.	Number from which deaths from Respiratory diseases were reported.	Number in each district.	Number from which deaths from Respiratory diseases were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.	Mean ratio per 1,000 of previous five years.	No.
	PATNA DIVISION.																								
1	Patna	20	20	2,815	457	112	95	115	112	96	99	125	102	86	104	147	203	747	649	1,396	0·7	0·7	0·7	0·5	1
2	Gaya	16	14	6,058	88	13	14	14	17	11	16	13	11	11	15	17	24	105	71	176	0·09	0·06	0·07	0·07	2
3	Shahabad	17	11	4,735	19	5	6	2	2	1	...	1	2	3	1	2	6	18	13	31	0·02	0·01	0·01	0·03	3
	Total ...	53	45	13,108	564	130	115	131	131	108	115	139	115	100	120	166	233	870	733	1,603	0·3	0·2	0·2	0·2	
	TIRHUT DIVISION.																								
4	Saran	13	13	4,305	450	57	50	41	77	50	56	64	67	56	58	53	101	451	279	730	0·3	0·2	0·2	0·3	4
5	Champaran	11	7	2,548	22	6	8	5	2	1	3	...	3	1	3	4	...	19	17	36	0·01	0·01	0·01	0·006	5
6	Muzaffarpur	14	10	4,059	10	8	8	10	5	...	7	4	4	4	7	9	12	38	40	78	0·02	0·02	0·02	0·03	6
7	Darbhanga	14	12	3,135	29	3	15	11	7	4	13	8	4	3	4	13	8	62	31	93	0·03	0·01	0·02	0·02	7
	Total ...	52	42	14,047	511	74	81	67	91	55	79	76	78	64	72	79	121	570	367	937	0·1	0·07	0·08	0·08	
	BHAGALPUR DIVISION.																								
8	Monghyr	13	12	2,610	12	5	6	7	7	6	4	6	1	3	3	11	6	41	24	65	0·03	0·02	0·03	0·03	8
9	Bhagalpur	14	6	3,080	30	2	4	8	8	9	8	4	6	4	4	5	5	43	24	67	0·03	0·02	0·03	0·04	9
10	Purnea	17	12	4,160	18	...	6	5	4	2	2	4	3	2	3	5	2	28	10	38	0·02	0·009	0·02	0·01	10
11	Santal Parganas	10	9	10,160	182	6	27	24	18	22	24	14	16	24	14	26	21	176	60	236	0·2	0·05	0·1	0·1	11
	Total ...	54	39	20,010	242	13	43	44	37	39	38	28	26	33	24	47	34	288	118	406	0·06	0·03	0·05	0·05	
	CHOTA NAGPUR DIVISION.																								
12	Hazaribagh	21	11	6,087	11	7	1	5	3	4	7	7	7	5	3	4	6	42	17	59	0·05	0·02	0·03	0·03	12
13	Ranchi	32	20	3,838	20	5	7	10	11	3	4	5	9	6	3	3	1	48	19	67	0·06	0·02	0·04	0·04	13
14	Palamau	10	3	3,134	3	1	...	...	...	...	...	2	...	...	...	...	...	2	1	3	0·005	0·002	0·004	0·01	14
15	Manbhum	35	20	4,642	100	8	20	25	29	18	16	21	14	17	11	15	22	151	65	216	0·2	0·1	0·1	0·1	15
16	Singhbhum	13	4	3,013	4	2	1	2	...	...	...	1	5	1	3	...	...	8	7	15	0·02	0·02	0·02	0·03	16
	Total ...	111	58	20,714	138	23	29	42	43	25	27	36	35	29	20	22	29	251	109	360	0·08	0·03	0·05	0·05	
	Total for the Province ...	270	184	67,879	1,455	240	268	284	302	227	259	279	254	226	236	314	417	1,979	1,327	3,306	0·1	0·08	0·1	0·09	

APPENDIX I—*concld.*

Annual Form No. XII.—Deaths registered from Plague in the districts of Bihar Province, during each month of the year 1937.

1	2	3		4		5												6			7			8	1
No.	District.	Circles of Registration.		Villages.														Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
		Number in each district.	Number from which deaths from Plague were reported.	Number in each district.	Number from which deaths from Plague were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.		
	PATNA DIVISION.																								
1	Patna	20	...	2,315	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2	Gaya	16	...	6,058	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
3	Shahabad	17	1	4,735	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	0·001	...	0·0005	0·003	3
	Total ...	53	1	13,108	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	0·003	...	0·0001	0·001	
	TIRHUT DIVISION.																								
4	Saran	13	8	4,305	105	154	156	301	313	73	...	3	5	2	10	22	59	425	673	1,098	0·6	0·5	0·4	0·4	4
5	Champaran	11	3	2,548	19	1	11	17	12	2	...	2	3	1	...	...	2	31	20	51	0·02	0·01	0·02	0·05	5
6	Muzaffarpur	14	5	4,059	24	10	3	93	91	43	2	...	...	...	3	10	18	95	178	273	0·09	0·1	0·09	0·3	6
7	Darbhanga	14	2	3,135	17	...	...	...	34	...	7	...	...	...	...	...	1	26	16	42	0·01	0·01	0·01	0·2	7
	Total ...	52	18	14,047	165	165	170	411	450	118	9	[illegible]	8	3	13	32	80	577	887	1,464	0·1	0·2	0·1	0·2	
	BHAGALPUR DIVISION.																								
8	Monghyr	13	...	2,010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·09	8
9	Bhagalpur	14	2	3,080	2	...	...	...	...	...	...	5	...	...	...	...	...	5	...	5	0·0004	...	0·0002	...	9
10	Purnea	17	...	4,160	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
11	Santal Parganas ...	10	...	10,160	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
	Total ...	54	2	20,010	2	...	...	...	...	...	...	5	...	...	...	...	...	5	...	5	0·001	...	0·0006	0·02	
	CHOTA NAGPUR DIVISION.																								
12	Hazaribagh	21	...	6,087	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
13	Ranchi	32	...	3,838	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
14	Palamau	10	...	3,134	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
15	Manbhum	35	...	4,612	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
16	Singhbhum	13	...	3,013	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
	Total ...	111	...	20,714	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Total for the Province ...	270	21	67,879	168	165	170	412	450	118	9	10	8	3	13	32	80	583	887	1,470	0·03	0·05	0·04	0·09	

9 D. P. H

APPENDIX II.

PROVINCIAL.

Statement showing details of registration in areas in which it is compulsory.

Compulsory registration area.	Population according to Census of 1931.	Probable number of births at the rate of 286 per 1,000 married women between the ages of 15 and 40.	Actual number of births registered during the year.	Probable birth-rate per *mille* (columns 2 and 3).	Registered birth-rate per *mille* during the year.	Number of deaths registered during the year. Including deaths in dispensary.	Number of deaths registered during the year. Excluding deaths in dispensary.	Death-rate per *mille*. Including deaths in dispensary.	Death-rate per *mille*. Excluding deaths in dispensary.	Number of persons prosecuted under Act IV (B. C.) of 1873.	Number of persons convicted.
1	2	3	4	5	6	7	8	9	10	11	12
1. Patna City	159,690	Not available.	2,369	Not available.	14·8	2,087	1,023	13·1	6·4	...	...
2. Bihar	46,994		738		15·7	393	343	8·3	7·3	...	...
3. Dinapore Nizamat	24,221		460		19·3	271	204	11·2	8·1	...	...
4. Barh	9,750		244		25·0	150	112	15·4	11·5	...	...
5. Khagol	7,412		163		21·9	133	133	17·9	17·9	...	...
6. Gaya	88,005		2,622		29·8	3,201	2,904	36·4	33·0	...	...
7. Tikari	5,481		246		44·8	83	82	15·1	14·9	...	...
8. Daudnagar	11,699		462		39·5	233	228	19·9	19·9	...	...
9. Arrah	48,922		496		10·1	218	129	4·5	2·6		
10. Buxar	13,449		340		25·2	185	146	13·6	10·8	18	17
11. Dumraon	14,421		244		32.0	30	...	2·7	...	...	...
12. Jagdispur	9,661		162		33·8	62	52	6·4	5·4	...	...
13. Sasaram	25,175		543		43·5	249	198	9·9	7·9	...	...
14. Bhabua	6,002		120		37·2	45	22	7·5	3·6	...	...
15. Chapra	47,448		1,412		29·7	926	781	19·5	16·4	...	...
16. Revelganj	8,812		320		36·3	166	166	18·8	18·8	...	...
17. Siwan	14,215		468		32·9	180	112	12·6	7·9	...	...
18. Bettiah	27,941		1,063		38·0	624	443	22·3	15·8	7	5
19. Motihari	17,545		332		18·9	141	54	8·0	3·1	...	...
20. Muzaffarpur	43,049		975		22·6	645	483	15·0	11·2	...	...
21. Sitamarhi	10,701		272		25·4	178	127	16·6	11·8	...	...
22. Hajipur	19,299		681		35·3	433	395	22·4	20·5	...	...
23. Lalganj	9,192		314		34·1	206	206	22·4	22·4	...	...
24. Darbhanga	60,676		1,826		30·0	1,362	1,007	22·4	16·6	...	...
25. Roserah	8,869		263		29·6	81	81	9·1	9·1	...	...
26. Samastipur	9,891		274		27·7	116	71	11·7	7·2	...	...
27. Madhubani	18,789		487		20·9	248	194	13·2	10·3	...	...
28. Monghyr	52,863		1,434		27·1	721	569	13·6	10·8	...	...
29. Jamalpur	30,346		1,079		35·6	536	491	17·7	16·2	...	...
30. Bhagalpur	83,847		1,634		19·4	1,279	054	15·2	12·6	...	...
31. Colgong	5,233		145		27·7	127	127	24·2	24·3	...	...
32. Purnea	15,474		209		13·5	286	144	18·5	9·3	...	...
33. Kishanganj	8,946		139		15·5	68	2	7·6	0·2	...	...
34. Katihar	15,864		141		8·9	60	...	3·8	...	...	...
35. Forbesganj	5,939		142		23·9	99	90	16·7	16·6	...	...
36. Sahibganj	15,883		146		9·2	39	6	2·5	0·4	...	...
37. Deoghar	14,217		100		7·0	106	46	7·4	3·2		
38. Dumka	9,471		71		7·5	36	...	3·8	...	6	5
39. Madhupur	8,965		100		11·1	46	16	5·1	1·8	3	3
40. Hazaribagh	20,977		353		16·8	190	59	9·0	2·8	...	...
41. Chatra	8,758		293		33·4	177	171	20·3	8·1	...	...
42. Giridih	21,122		270		12·7	108	81	5·1	9·2	32	32
43. Ranchi	50,517		751		14·8	482	236	9·5	4·7		...
44. Lohardaga	7,577		198		26·1	83	83	11·3	10·9	...	...
45. Daltonganj	12,040		209		17·4	69	17	5·7	1·4	...	...
46. Purulia	25,974		472		18·1	256	85	9·8	3·3	...	...
47. Raghunathpur	7,139		201		28·1	169	166	23·6	23·2	...	...
48. Jhaldah	6,924		154		22·2	80	76	11·5	11·0	...	...
49. Dhanbad	16,356		513		31·3	226	113	13·8	6·9	...	...
50. Chaibasa	10,785		246		22·8	151	110	14·0	10·2	...	...
51. Chakradharpur	11,191		146		13·0	81	70	7·2	6·3	...	...
52. Jugsalai	8,721		215		24·6	49	49	5·6	5·6	...	...
53. Jamshedpur	83,738		295		3·5	393	75	4·7	0·9	...	...
(a) Total ...	1,465,160		27,561		20·8	18,575	13,639	14·0	10·3	66	62

(a) Excluding cantonment population.

APPENDIX III.

JHARIA MINING AREA.

STATISTICS OF EPIDEMIC DISEASES.

1937.

Month.	Total births.	Total deaths.	Influenza. Cases.	Influenza. Deaths.	Cholera. Cases.	Cholera. Deaths.	Small-pox. Cases.	Small-pox. Deaths.	Plague. Cases.	Plague. Deaths.
1	2	3	4	5	6	7	8	9	10	11
January	138	76	177	1	3	2	12	...	...	...
February	105	75	160	...	...	...	31	1	...	...
March	161	99	202	...	1	1	68	...	...	...
April	135	94	224	2	1	...	61	...	...	...
May	130	95	333	1	3	...	18	...	...	...
June	158	101	484	...	8	5	6	...	...	...
July	179	101	571	...	4	1	...	...	...	...
August	194	110	823	1	...	...	1	...	...	...
September	173	171	821	1	...	...	...	...	...	...
October	166	130	683	1	...	...	1	...	...	...
November	172	96	428	1	...	...	2	...	...	...
December	155	100	191	3	...	...	3	...	...	...
Total ...	1,866	1,248	5,097	11	19	9	203	1	...	...
Ratio per mile	14·5	9·7	39·7	0·09	0·1	0·07	1·6	0·007	...	...

N. B.—The figures relate to the labour population only and the ratios are calculated accordingly.

APPENDIX IV.

Summary of the activities of the Public Health Circle, Public Works Department relating to the sanitary improvements in urban and rural areas of Bihar during the calendar year 1937.

1. *Projects.*—The following projects have been completed and submitted :—

FORECAST.

				Rs.
1. Purnea drainage	..	..	..	1,02,472
2. Purnea water-supply	..	..	..	2,39,600
3. Jugsalai water-supply	..	..	..	1,44,000
4. Extension of Muzaffarpur water works	..		..	60,000

PRELIMINARY.

1. Earthquake damage repair Muzaffarpur water-supply..	1,09,290

DETAILED.

1. Muzaffarpur drainage scheme	..	..	6,45,517

EXAMINATION OF PROJECTS PREPARED BY OTHER AGENCIES.

1. Madhubani drainage	..	..	..	40,312
2. Municipal market, Deoghar ..		..	..	2,500
3. Municipal market, Monghyr ..		..	..	8,706

MINOR WORKS.

Two hundred and five estimates prepared and submitted of the total value of Rs. 1,77,000.

CONSTRUCTION.

Patna drainage.—The whole project is nearing completion. Expenditure during the year was Rs. 1,42,789.

Bhagalpur water works.—The filtration plant has been completed and the work is in progress in the new intake well at Barari and on the installation of pumping plant for the tube-well at Mirjanhat. Expenditure during the year was Rs. 92,585.

Motihari Drainage—The reconstruction of the drainage system damaged by the earthquake has been completed at a cost of Rs. 57,480.

Monghyr Water Works.—The reorganisation of the supply consisting of the construction of a reinforced concrete service reservoir and installation of duplicate sets of unfiltered water motor driven pumps has been successfully completed at a total cost of Rs. 77,955; the expenditure during the year was Rs. 49,611.

Patna-Bankipur Water Works.—The supply is obtained from 13 tube wells out of which the yield of one in Amlatola diminished so seriously as to render it almost useless. As an experiment it has been cleaned with an acid solution known as "Noricene" with very satisfactory results at a cost of Rs. 607.

Maintenance.—The Patna-Bankipur Water Works has been maintained in an efficient condition on behalf of the Joint Water Works Committee. The average daily supply was 1,506, 394 gallons being 240,865 gallons more than the average daily supply in 1936.

The municipalities of Arrah, Bhagalpur, Daltanganj, Gaya, Monghyr and Muzaffarpur were assisted in the maintenance of the public water-supplies and no failure occurred during the year.

General.—The total value of the work carried out by the Circle on behalf of local authorities was :—

				Rs.
(*a*) Original work	..	..	..	4,86,171
(*b*) Repairs and maintenance	..	...	..	1,26,646

W. G. CAME,
Superintending Engineer, Public Health Circle, Bihar.

APPENDIX V.

Table showing health services in Rural and Urban areas of Bihar Province during the year 1937.

Rural areas.

District Board.	Medical officers of Health. Holding D. P. H. Whole time.	Medical officers of Health. Holding D. P. H. Part time.	Medical officers of Health. Licentiates L. M. P. Whole time.	Medical officers of Health. Licentiates L. M. P. Part time.	Epidemic staff.	Sanitary and Health Inspectors.	Vaccinators. Male.	Vaccinators. Female.	School Medical officers.	Other Health staff.
1	2	3	4	5	6	7	8	9	10	11
Patna	1	...	...	...	...	14	97	...	...	36
Gaya	1	...	4	...	...	...	100	...	...	24
Shahabad	1	...	...	...	5	5	123	...	...	...
Patna Division	...	...	...	...	...	...	...	...	2	...
Saran	1	...	...	...	9	3	88	...	...	...
Champaran	1	...	...	...	7	10	83	...	...	2
Muzaffarpur	1	...	1	...	10	13	79	...	...	...
Darbhanga	1	...	3	...	2	11	99	...	...	...
Tirhut Division ...	...	...	...	...	...	...	...	...	2	...

Urban areas.

Municipalities.	Medical officers of Health. Holding D. P. H. Whole time.	Medical officers of Health. Holding D. P. H. Part time.	Medical officers of Health. Licentiates (L. P. H. S.) Whole time.	Medical officers of Health. Licentiates (L. P. H. S.) Part time.	Sanitary and Health Inspectors.	Vaccinators. Male.	Vaccinators. Female.	Inspector of vaccination.	School Medical Officers.	Other Health staff.
12	13	14	15	16	17	18	19	20	21	22
Patna City	1	...	...	...	5	7	...	...	...	8
Patna Administration Committee	...	1	...	...	3	1	...	...	...	...
Bihar	...	...	...	...	1	1	...	...	...	2
Dinapur Nizamat	...	...	...	...	1	1	...	...	...	2
Dinapur Cantonment ...	1-R. A. M. C.	...	...	...	1	1	...	...	...	2
Barh	...	...	...	...	1	1	...	...	...	...
Khagole	...	...	...	...	1	1	...	...	...	...
Gaya	1	...	...	...	3	2	...	...	...	10
Tikari	...	...	...	...	...	1	...	...	...	1
Daudnagar	...	...	...	...	...	1	...	...	...	...
Arrah	...	...	...	...	2	2	...	...	...	...
Buxar	...	...	...	...	1	1	...	...	...	...
Dumraon...	...	...	...	...	1	1	...	...	...	...
Jagdishpur	...	...	...	...	...	1	...	...	...	...
Sasaram	...	...	...	...	1	1	...	...	...	...
Bhabua	...	...	...	...	1	1	...	...	...	...
... ...	...	...	...	...	1	3	...	...	...	...
Chapra	...	...	...	...	1	3	...	...	...	...
Revelganj	...	...	...	...	1	1	...	...	...	...
Siwan	...	...	...	...	...	1	...	...	...	...
Bettiah	...	...	1	...	1	1	...	...	...	...
Motihari	...	...	...	...	1	1	...	...	...	...
Muzaffarpur	...	...	1	...	2	2	...	...	...	...
Sitamarhi	...	...	...	...	1	1	...	...	...	...
Hajipur	...	...	...	...	1	2	...	...	...	...
Lalganj	...	...	...	...	...	1	...	...	...	...
Darbhanga	1	...	...	...	2	2	...	...	...	...
Roserah	...	...	1	...	...	1	...	...	...	...
Samastipur	...	...	...	...	1	1	...	...	...	...
Madhubani	...	...	...	...	1	1	...	...	...	...
... ...	...	...	...	...	...	...	...	...	...	...

APPENDIX V.

Table showing health services in Rural and Urban areas of Bihar Province during the year 1937—concld.

Rural areas.

District Board.	Medical officers of Health. Holding D. P. H. Whole time.	Medical officers of Health. Holding D. P. H. Part time.	Medical officers of Health. Licentiates L. M. P. Whole time.	Medical officers of Health. Licentiates L. M. P. Part time.	Epidemic staff.	Sanitary and Health Inspectors.	Vaccinators. Male.	Vaccinators. Female.	School Medical officers.	Other Health staff.
1	2	3	4	5	6	7	8	9	10	11
Monghyr	...	...	...	...	20	3	9	...	...	58
Bhagalpur	...	...	...	...	100	4	65	...	...	2
Purnea	1	...	...	...	38	17	106	...	...	1
Santal Parganas	...	...	...	...	2	...	15	1	...	...
Bhagalpur Division	...	...	...	...	...	...	...	...	2	...
Hazaribagh	...	...	...	...	1	1	4	...	...	10
Ranchi	...	...	...	...	...	...	7	...	...	...
Palamau	...	...	...	...	3	...	26	...	...	...
Manbhum	1	...	...	...	4	4	42	...	...	...
Singhbhum	...	...	...	...	...	...	2	...	...	...
Chota Nagpur Division	...	...	...	...	...	...	...	...	2	...

Urban areas.

Municipalities.	Medical officers of Health. Holding D. P. H. Whole time.	Medical officers of Health. Holding D. P. H. Part time.	Medical officers of Health. Licentiates (L. P. H. S.) Whole time.	Medical officers of Health. Licentiates (L. P. H. S.) Part time.	Sanitary and Health Inspectors.	Vaccinators. Male.	Vaccinators. Female.	Inspector of Vaccination.	School Medical Officers.	Other Health staff.
12	13	14	15	16	17	18	19	20	21	22
Monghyr	...	...	...	...	1	2	...	1 (Monghyr and Jamalpur)	...	2
Jamalpur	1	...	...	...	2	1	...			
Bhagalpur	1	...	...	...	3	3	...	1	...	...
Colgong	...	...	...	1	...	1	...	...	...	1
Purnea	...	...	...	...	1	1	...	...	...	...
Kishanganj	...	...	...	...	1	1	...	...	...	...
Katihar	...	...	...	...	1	1	...	...	...	...
Forbesganj	...	...	...	...	...	1	...	...	...	...
Sahebganj	...	...	...	...	1	1	...	1 (Sahebganj, Deoghar, Dumka and Madhupur)	...	...
Deoghar	...	...	1	...	...	1	...			
Dumka	...	...	...	...	...	1	..			
Madhupur	...	...	...	...	1	1	...			
... ...	...	...	...	...	...	...	...	...	...	...
Hazaribagh	...	...	...	...	1	1	...	1 (Hazaribagh, Chatra and Giridih)	...	...
Chatra	...	...	...	...	...	1	...			
Giridih	...	...	...	...	1	1	...			
Ranchi	1	...	...	...	3	2	...	1 (Ranchi and Lohardaga)	...	...
Lohardaga	...	...	...	...	...	1	..			
Daltonganj	...	...	...	...	1	1½	...	1	...	...
Purulia	...	...	...	...	1	1	...	1 (Purulia, Raghunathpur, Jhalda and Dhanbad)	...	...
Raghunathpur	...	...	...	...	...	1	...			
Jhalda	...	...	...	...	1	1	...			
Dhanbad	...	...	...	...	2	...	...			
Chaibassa	...	...	...	...	...	1	...	1 (Chaibassa, Chakradharpur and Jugsalai)	...	...
Chakradharpur	...	...	...	...	...	1	...			
Jugsalai	...	...	...	1	1	1	...	...	...	...
Jamshedpur Notified Area ...	1	...	...	...	36	5	2	1	...	2
... .	...	...	...	...	...	...	...	...	...	...

APPENDIX VI.

Table showing maternity and child welfare centres, health visitors and trained midwives in rural and urban areas in Bihar during the year 1937.

District.	Maternity and child welfare.												Remarks.
	Centres maintained by—						Trained visitors.		Trained midwives.		Trained dais.		
	Government.		Local and municipal bodies.		Other agencies.								
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Patna ...	...	6(a)	...	1(a)	...	3	...	4(b)	4	7	...	...	
Gaya ...	...	...	...	...	...	...	...	...	11	1	...	4	(a) Midwifery circles. (b) Including one Maternity Supervisor entertained by Government.
Shahabad ...	...	...	...	...	...	...	...	...	3	3	12	...	
Muzaffarpur ...	...	...	...	...	...	1	...	1	...	...	1	2	
Darbhanga ...	...	...	...	1(a)	4	...	...	...	...	1	...	3	
Saran ...	...	...	...	...	...	...	...	...	1	...	5	4	
Champaran ...	...	...	...	...	...	...	...	...	1	2	...	...	
Monghyr ...	...	...	...	...	...	1	...	1	1	1	...	2	
Purnea ...	...	...	...	...	...	...	...	...	...	2	1	1	
Bhagalpur ...	...	...	...	...	...	...	...	...	3	1	...	...	
Santal Parganas	...	...	...	...	...	...	...	...	2	2	...	...	
Ranchi ...	...	...	...	1(a)	...	1	...	1	2	1	...	12	
Manbhum ...	...	...	...	1(a)	4	...	...	...	...	2	5	3	
Singhbhum ...	...	...	...	...	...	...	...	...	...	5	...	8	
Palamau ...	...	...	...	...	...	...	...	...	...	1	...	...	
Hazaribagh ...	...	...	...	...	...	—	...	...	2	4	...	...	
Total ...	...	6	...	4	4	6	...	7	30	37	24	39	

STATEMENT I.

STATEMENT NO. I.—*Showing particulars of Vaccination in Districts of Bihar and Orissa during the year 1937-38.*

Number.	District.		Population of district according to the census of 1931.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated. Male.	Female.	Total.	Average number of persons vaccinated by each vaccinator.	Total.	Vaccination. Successful. Under one year.	One year and under six years.	Total of all ages.	Unknown.	Re-vaccination. Total.	Successful.	Unknown.	Percentage of successful cases in which the results were known. Primary.	Re-vaccination.	Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only.	Average cost of each successful cases performed by the vaccination staff.
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
																				Rs. a. p.		Rs. a. p.
	Patna Division.																					
1	Patna ...	District excluding towns ...	1,846,474	97	40,402	33,431	73,833	761	[illegible]	15,411	46,889	63,551	237	9,953	2,501	5,787	99·87	60·03	42·01	3,888 0 0	77,576	0 0 9
		Towns		12	12,653	7,331	19,984	1,665	[illegible]	1,732	4,225	6,221	261	13,012	4,194	5,159	92·70	53·40				
2	Gaya ...	District excluding towns ...	2,388,462	95	48,331	37,978	86,309	908	[illegible]	13,468	55,287	71,515	387	14,045	4,807	7,100	99·50	69·21	33·41	1,442 6 6	79,804	0 0 8
		Towns		4	1,928	1,425	3,353	833	[illegible]	1,534	829	1,846	17	966	410	93	77·90	46·96				
3	Shahabad ...	District excluding towns ...	1,993,489	124	33,720	26,306	60,026	484	[illegible]	12,078	35,215	55,637	173	4,134	2,623	793	99·85	78·45	31·63	921 0 0	63,030	0 0 3
		Towns		7	3,723	2,591	6,314	903	[illegible]	1,618	1,799	3,431	46	2,811	765	311	99·25	33·60				
	Total of Patna Division	District excluding towns ...	6,228,425	316	122,453	97,705	220,158	697	[illegible]	40,957	137,391	190,703	797	28,132	9,931	13,680	99·73	68·73	35·30	6,251 6 6	220,410	0 0 5
		Towns		23	18,304	11,347	29,651	1,289	[illegible]	4,884	6,853	11,498	824	16,789	5,369	5,563	91·70	47·82				
	Tirhut Division.																					
4	Saran ...	District excluding towns ...	2,486,468	88	49,864	39,658	89,522	1,017	[illegible]	13,528	69,427	78,582	1,496	8,663	3,155	2,009	99·01	47·42	34·12	1,547 4 6	84,855	0 0 3
		Towns		5	1,599	1,276	2,875	575	[illegible]	760	1,467	2,249	30	575	254	145	99·07	59·07				
5	Champaran	District excluding towns ...	3,145,687	79	49,294	39,260	88,563	1,121	[illegible]	11,854	54,037	67,443	569	20,034	6,930	5,815	99·24	48·73	35·97	609 13 6	77,174	0 0 1
		Towns		2	1,692	1,259	2,951	1,475	[illegible]	462	732	1,214	2	1,705	833	331	97·59	60·00				
6	Muzaffarpur	District excluding towns ...	2,941,025	39	70,583	58,257	128,840	3,304	[illegible]	14,833	89,104	104,243	111	24,157	9,055	6,927	99·68	52·55	39·76	813 7 0	116,943	0 0 1
		Towns		5	3,062	2,092	5,154	1,031	[illegible]	405	2,381	2,711	13	2,396	533	1,123	98·76	41·90				
7	Darbhanga	District excluding towns ...	3,166,094	99	61,603	54,477	116,080	1,173	[illegible]	14,548	90,521	105,286	33	10,514	5,027	2,449	99·76	62·36	35·85	1,133 1 6	113,501	0 0 2
		Towns		5	2,308	1,799	4,167	835	[illegible]	347	2,331	2,680	4	1,465	398	380	99·33	36·68				
	Total of Tirhut Division	District excluding towns ...	10,739,274	305	231,344	191,661	423,005	1,387	[illegible]	63,763	303,089	355,554	2,209	63,367	24,167	17,200	99·47	52·34	36·54	4,103 1 6	392,473	0 0 3
		Towns		17	8,721	6,426	15,147	891	[illegible]	1,994	6,811	8,854	49	6,141	2,018	1,979	98·85	48·48				
	Bhagalpur Division.																					
8	Monghyr ...	District excluding towns ...	2,287,154	62	67,786	43,261	111,047	1,791	[illegible]	12,780	32,336	58,214	1,238	52,822	23,388	19,790	99·50	70·80	38·46	3,638 6 3	85,945	0 0 8
		Towns		3	2,162	1,197	3,359	1,120	[illegible]	613	1,763	2,515	...	1,364	433	327	100·00	41·75				
9	Bhagalpur	District excluding towns ...	2,234,632	37	69,264	43,302	112,566	3,043	[illegible]	25,626	41,443	58,798	889	10,024	2,403	6,586	97·34	70·00	28·85	4,531 2 6	63,080	0 1 2
		Towns		4	2,431	1,398	3,879	969	[illegible]	732	765	1,100	29	1,437	308	772	95·24	46·31				
10	Purnea ...	District excluding towns ...	2,186,543	76	39,649	31,669	71,818	938	[illegible]	15,995	24,121	47,594	810	12,980	1,524	10,403	99·44	59·17	25·41	8,895 4 9	52,136	0 2 8
		Towns		4	1,720	901	2,621	655	[illegible]	326	449	946	68	2,234	730	577	96·04	44·15				
11	Santal Parganas	District excluding towns ...	2,051,472	74	34,859	26,793	61,652	833	[illegible]	23,310												
		Towns		4	2,062	1,235	3,287	821	[illegible]	481												
	Total of Bhagalpur Division.	District excluding towns ...	8,759,801	249	211,558	145,025	356,583	1,432	[illegible]	77,711	146,708	226,363	3,991	124,987	27,767	83,113	99·01	66·31	30·26	22,354 5 3	265,056	0 1 4
		Towns		15	8,426	4,721	13,146	876	[illegible]	2,154	3,820	6,024	102	6,829	1,694	2,533	97·87	38·89				

STATEMENT NO. I.—*Showing particulars of Vaccination in the Districts of Bihar during the year* 1937-38—concld.

Number.	District.		Population of district according to the census of 1931.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated. Male.	Female.	Total.	Average number of persons vaccinated by each vaccinator.	Primary vaccination. Total.	Successful. Under one year.	One year and under six years.	Total of all ages.	Unknown.	Re-vaccination. Total.	Successful.	Unknown.	Percentage of successful cases in which the results were known. Primary.	Revaccination.	Persons successfully vaccinated per 1,000 of population.	Total costs of Vaccination Department.	Number of all successful vaccinations and revaccinations performed by the vaccination staff only.	Average cost of each successful cases performed by the vaccination staff.
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Chota Nagpur Division.																			Rs. a. p.		Rs. a. p.
12	Hazaribagh	District excluding towns ...	1,517,357	44	22,212	20,116	42,328	960	38,609	7,636	20,922	38,618	16	3,629	1,457	1,576	99·91	70·97	29·51	4,243 2 6	44,783	0 1 7
		Towns		3	1,932	1,095	3,027	1,009	1,596	703	799	1,515	76	1,411	459	414	99·67	45·13				
13	Ranchi ...	District excluding towns ...	1,567,149	48	27,105	23,743	50,848	1,058	38,293	[illegible],456	5,784	38,285	4	12,555	7,385	2,165	99·99	71·08	30·93	5,926 4 4	48,479	0 1 11
		Towns		5	2,239	1,509	3,748	750	2,056	1,256	497	1,764	290	1,692	771	457	99·86	62·43				
14	Palamau	District excluding towns ...	818,736	36	31,120	17,963	49,082	1,363	24,060	9,690	9,204	23,567	428	25,002	12,733	6,166	99·64	67·59	47·25	3,782 15 0	38,685	0 1 9
		Towns		1	1,752	1,071	2,823	2,823	281	180	90	280	...	2,542	1,567	93	99·64	63·99				
15	Manbhum	District excluding towns ...	1,810,890	73	36,861	29,644	66,505	911	45,363	[illegible]94	29,562	34,245	735	21,142	10,308	4,811	76·73	63·12	26·84	674 0 0	48,609	0 0 3
		Towns		5	4,550	2,720	7,270	1,434	2,303	792	1,388	2,284	16	4,967	1,772	1,223	99·87	47·33				
16	Singhbhum	District excluding towns ...	929,802	30	13,325	11,264	24,589	819	20,139	[illegible],129	6,854	19,400	592	4,450	2,058	1,726	99·25	75·55	34·19	*3,339 7 3	31,791	0 1 8
		Towns		14	14,000	7,138	21,138	1,510	3,658	[illegible],992	1,220	3,346	116	17,450	2,531	4,281	94·46	19·17				
	Total of Chota Nagpur Division.	District excluding towns ...	6,643,934	231	130,623	102,729	233,352	1,010	166,[illegible]	[illegible],205	72,323	154,145	1,775	66,778	33,940	16,444	93·53	67·44	31·96	17,961 13 1	212,347	0 1 4
		Towns		28	24,473	13,533	38,006	1,357	9,894	[illegible],923	4,001	9,189	408	28,112	7,100	6,468	97·80	32·81				
	Total of Vaccine Department.	District excluding towns ...	32,371,434	1,101	695,978	537,120	1,233,098	1,120	947,884	[illegible],636	659,514	926,765	7,772	283,264	95,905	130,436	98·37	62·69	33·68	50,673 3 4	1,090,286	0 0 9
		Towns		83	59,923	36,027	95,950	1,156	38,019	[illegible],955	21,485	35,565	973	57,931	16,181	16,543	96·00	39·09				
		Total		1,184	755,901	573,147	1,329,048	1,122	987,853	[illegible],591	680,999	962,330	8,745	341,195	111,986	146,979	98·28	57·66				
	Jails		...	...	23,854	599	24,453	...	253	10	16	191	32	24,200	8,226	3,841	86·42	40·35	...	...	...	...
	Cantonments		...	...	315	182	497	...	318	207	96	307	3	179	74	6	97·46	42·77	...	...	...	...
	Total of dispensary staff ...		...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...
	Total of private medical practitioners ...		...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...
	Total of Railway Dispensary ...		...	...	783	163	946	...	145	65	72	140	3	801	143	354	98·59	31·99	...	...	...	...
	Railway Collieries and Fa tories ...		...	...	8,539	3,864	12,403	...	1,878	893	1,033	1,570	120	10,525	4,986	2,103	89·30	59·20	...	...	...	...
	Cooly Depot		...	...	1,533	869	2,402	...	333	46	109	333	...	2,069	...	2,069	100·00	...	...	...	...	...
	Grand Total ...		1,365	...	790,925	572,824	1,369,749	...	990,780	292	682,325	964,871	8,903	378,969	125,415	155,252	98·27	56·08	33·68	50,673 3 4	1,090,256	0 0 9

SUMMARY.

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which the results were known.		Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Vaccination Department.	Average cost of each successful case.
—	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under 6 years.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
												Rs. a. p.	Rs. a. p.
BY SPECIAL STAFF.													
Statement (I)	987,853	341,195	387,853	341,195	98'28	57'66	1,184	1,122	272,591	680,999	83'68	50,673 3 4	0 0 [illegible]
BY OTHER AGENCIES.													
Collieries, Dispensaries and Leper Asylum. Cooly Depôt, Jails and Cantonments.	2,927	37,774	12,927	37,774	91'76	45'99	...	...	701	1,326			
Total	990,780	378,969	390,780	378,969	98'27	56'08	1,184	1,122	273,292	682,325	83'68	50,673 3 4	0 0 [illegible]

Comparative statement no. II.—Showing the percentage of persons primarily vaccinated to the total number of vaccinations performed in the Province of Bihar in each of the undermentioned official years.

Establishments.	Years.									
	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
1	2	3	4	5	6	7	8	9	10	11
Government staff	14'13	7'36	9'56	9'99	...	4'02	5'22	17'3	...	11'94
Dispensaries	...	14'75	9'45	75'00	14'06	58'56	24'94	48'21	24'44	...
Municipal	73'47	71'71	64'03	67'13	30'88	29'00	33'07	22'57	30'63	39'62
District Board	60'14	67'12	70'70	64'30	38'61	17'94	42'69	61'90	66'32	54'49
Licensed vaccinators	97'60	97'59	92'75	97'29	90'97	84'19	70'93	...	...	90'83
Rails and collieries	34'22	35'25	34'23	28'78	21'47	9'04	5'97	12'12	39'15	15'19
Jails	1'49	1'34	1'11	0'78	2'20	0'89	1'33	4'88	3'23	1'03
Cooly Depôt	2'31	0'51	0'45	1'42	7'29	5'07	3'09	11'17	24'96	13'86
Cantonment	...	93'08	89'21	94'03	53'81	73'73	60'81	30'06	91'62	63'98

STATEMENT NO. III.—Showing particulars of vaccination verified by inspecting Officers during the year 1937-38.

District.	Total number of persons vaccinated. Primary.	Total number of persons vaccinated. Re-vaccination.	Total number inspected— By Assistant Directors of Public Health or Superintendent of Vaccination. Assistant Directors of Public Health. Primary.	Re-vaccination.	Superintendent of vaccination. Primary.	Re-vaccination.	By Native Superintendents or other Inspecting Officers. District Inspectors and Health Inspectors. Primary.	Re-vaccination.	Sub-Inspectors. Primary.	Re-vaccination.	Percentage of inspection to total number vaccinated. By Assistant Directors of Public Health or Superintendent of Vaccination. Assistant Directors of Public Health. Primary.	Re-vaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13
Patna	71,209	24,584	1,611	1,513	1,866	78	9,990	1,306	...	...	2·26	6·1
Gaya	74,651	16,369	1,320	1,944	1,943	1,598	5,804	...	...	...	1·77	11·86
Shahabad	59,523	10,891	259	155	8,108	180	4,844	204	...	..	0·43	1·42
Saran	83,160	11,118	6	239	1,520	31	7,123	...	...	...	0·007	2·15
Champaran ...	69,775	23,681	...	11	5,307	1,942	43,941	2,418	...	...	...	0·05
Muzaffarpur ...	107,443	27,787	1,441	1,780	2,448	...	43,908	644	...	...	1·34	6·22
Darbhanga ...	108,372	13,250	878	1,773	3,947	356	45,968	1,180	...	...	0·81	13·38
Monghyr	63,391	51,015	1,130	1,775	1,219	...	11,856	...	20,713	251	1·78	3·48
Bhagalpur ...	62,262	58,152	595	784	4,492	294	5,347	2,649	...	...	0·95	1·35
Purnea	62,480	12,858	1,352	3,355	6,189	210	34,397	1,160	...	...	2·16	26·09
Santal Parganas ...	49,818	19,512	3,098	...	856	...	8,526	22	12,839	253	6·20	...
Hazaribagh ...	41,668	10,462	3,201	...	451	...	2,145	...	8,641	124	7·68	...
Ranchi	40,349	14,954	2,768	...	150	588	8,509	325	17,350	576	6·86	...
Palamau	24,694	29,317	1,194	1,478	272	...	3,181	...	3,779	353	4·83	5·04
Manbhum	47,666	26,109	1,575	...	1,459	39	7,577	1,329	...	...	4·30	...
Singhbhum ...	24,319	28,890	1,703	...	858	19	677	23	3,107	54	7·00	...
TOTAL	990,780	378,969	22,121	14,757	41,145	5,227	238,787	11,160	66,429	1,611	2·23	3·89

District.	Percentage of inspection to total number vaccinated (continued). By Assistant Directors of Public Health or Superintendent of Vaccination. Superintendent of Vaccination. Primary.	Re-vaccination.	By Native Superintendents or other Inspecting Officers. District Inspectors and Health Inspectors. Primary.	Re-vaccination.	Sub-Inspectors. Primary.	Re-vaccination.	Percentage of cases found successful to total number inspected. By Assistant Directors of Public Health or Superintendent of Vaccination. Assistant Directors of Public Health. Primary.	Re-vaccination.	Superintendent of Vaccination. Primary.	Re-vaccination.	By Native Superintendents or other Inspecting Officers. District Inspectors and Health Inspectors. Primary.	Re-vaccination.	Sub-Inspectors. Primary.	Re-vaccination.	Percentage of successful case reported by vaccinator. Primary.	Re-vaccination.
1	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Patna	2·62	0·32	14·02	5·31	...	...	98·30	93·39	98·07	10·25	98·47	...	...	...	98·40	46·80
Gaya	2·60	9·66	7·77	...	...	...	98·50	92·60	99·54	100·00	99·86	...	...	...	98·90	34·20
Shahabad	13·62	1·65	8·13	1·87	...	...	94·20	90·32	15·38	28·89	31·05	28·43	...	...	99·69	63·45
Saran	1·82	0·27	88·56	...	...	..	100·00	100·00	99·31	29·03	99·03	...	...	...	97·15	36·00
Champaran	7·60	8·20	62·68	10·21	...	...	...	100·00	99·80	38·83	99·58	41·27	...	...	98·33	46·12
Muzaffarpur	2·28	...	40·87	2·31	...	...	99·59	96·53	99·79	...	99·78	37·90	...	...	99·50	37·40
Darbhanga	3·64	1·93	42·43	8·90	...	...	98·63	96·53	98·53	48·04	99·70	54·91	...	...	99·68	41·27
Monghyr	1·92	...	18·70	...	32·67	0·42	98·60	100·00	100·00	...	99·78	...	99·68	98·60	99·73	1·32
Bhagalpur	7·21	0·50	8·59	4·55	...	...	98·10	7·65	99·56	100·00	100·00	100·00	...	...	97·43	44·27
Purnea	9·90	1·63	55·05	9·03	...	...	96·82	87·87	93·40	24·76	92·19	33·71	...	...	95·32	26·56
Santal Parganas	1·77	...	7·07	0·11	25·77	1·29	93·55	...	99·77	...	96·08	27·27	95·98	42·68	97·62	17·94
Hazaribagh	1·08	...	5·14	...	20·74	1·18	94·96	...	100·00	...	98·50	...	98·22	20·16	99·02	30·72
Ranchi	0·37	3·93	21·08	2·17	43·00	3·85	93·35	...	100·00	46·26	99·27	38·46	99·44	43·36	99·99	41·03
Palamau	1·10	...	12·68	...	15·30	1·20	99·30	94·72	97·06	...	98·89	...	97·14	45·89	99·64	74·62
Manbhum	3·12	0·14	15·90	4·71	...	...	97·32	...	99·60	89·74	99·65	57·85	...	...	99·79	54·53
Singhbhum	2·53	0·07	2·76	0·08	12·77	0·19	91·19	...	97·90	100·00	97·31	95.65	99·03	83·33	95·53	29·62
TOTAL	4·15	1·38	24·10	2·94	6·70	0·42	69·23	89·45	81·93	61·41	97·06	50·25	98·54	51·52	97·86	39·11

STATEMENT NO. IV.—Showing side by side the ratios per mille of population

deaths from small-pox and the ratios of successful vaccinations per mille of population during the ten years ending 1937-38.

District.	1928-29. Ratio of deaths from small-pox.	1928-29. Ratio of successful vaccination per mille of population.	1929-30. Ratio of deaths from small-pox.	1929-30. Ratio of successful vaccination per mille of population.	1930-31. Ratio of deaths from small-pox.	1930-31. Ratio of successful vaccination per mille of population.	1931-32. Ratio of deaths from small-pox.	1931-32. Ratio of successful vaccination per mille of population.
1	2	3	4	5	6	7	8	9
Patna	0·49	33·32	0·40	28·34	0·23	25·86	0·30	26·19
Gaya	0·30	27·20	0·27	30·24	0·56	30·79	0·29	25·96
Shahabad	0·37	24·90	0·16	23·68	0·32	23·65	0·53	25·31
Saran	0·19	36·99	0·19	41·23	0·17	33·68	0·34	52·43
Champaran	0·07	23·84	0·10	24·51	0·06	20·98	0·12	20·44
Muzaffarpur	0·18	35·52	0·25	36·18	0·06	34·63	0·06	31·32
Darbhanga	0·16	36·36	0·12	37·63	0·18	35·54	0·17	32·47
Monghyr	0·53	38·29	0·45	35·86	0·42	30·35	0·16	28·85
Bhagalpur	0·45	38·32	0·16	35·17	0·08	34·53	0·07	34·15
Purnea	0·65	23·77	0·18	22·20	0·08	21·38	0·05	19·67
Santal Parganas	0·46	34·28	0·20	31·32	0·36	34·28	0·25	30·05
Hazaribagh	0·30	38·74	0·15	35·92	0·13	36·81	0·10	33·96
Ranchi	0·24	40·73	0·08	40·80	0·04	55·24	0·05	35·04
Palamau	1·35	30·66	0·95	30·67	0·43	33·58	0·23	37·35
Manbhum	0·06	38·51	0·05	35·79	0·13	38·93	0·05	30·53
Singhbhum	0·12	27·58	0·11	29·46	0·27	35·62	0·14	25·28
Total ...	0·40	32·25	0·21	32·80	0·21	32·20	0·18	28·99

District.	1932-33. Ratio of deaths from small-pox.	1932-33. Ratio of successful vaccination per mille of population.	1933-34. Ratio of deaths from small-pox.	1933-34. Ratio of successful vaccination per mille of population.	1934-35. Ratio of deaths from small-pox.	1934-35. Ratio of successful vaccination per mille of population.	1935-36. Ratio of deaths from small-pox.	1935-36. Ratio of successful vaccination per mille of population.	1936-37. Ratio of deaths from small-pox.	1936-37. Ratio of successful vaccination per mille of population.	1937-38. Ratio of deaths from small-pox.	1937-38. Ratio of successful vaccination per mille of population.
1	10	11	12	13	14	15	16	17	18	19	20	21
Patna	0·68	41·13	0·56	35·65	0·24	41·63	0·37	52·04	0·42	40·82	0·25	42·01
Gaya	1·15	41·84	1·96	37·20	0·58	30·12	0·57	35·75	0·69	31·18	0·45	33·41
Shahabad	1·20	29·36	1·12	26·07	0·39	20·97	1·34	29·97	1·08	34·34	0·27	31·62
Saran	1·29	39·63	1·18	47·99	0·14	23·31	0·19	28·32	0·48	33·77	0·41	34·12
Champaran	0·85	27·41	1·06	31·13	0·20	32·33	0·29	37·96	0·11	23·61	0·18	35·97
Muzaffarpur	0·37	37·23	0·77	49·18	0·15	50·36	0·17	47·32	0·09	43·76	0·03	39·76
Darbhanga	0·44	37·89	0·45	34·29	0·26	41·58	0·31	41·93	0·21	36·99	0·03	35·85
Monghyr	0·57	32·96	1·33	31·44	0·70	30·28	1·03	23·53	0·79	26·06	0·19	27·93
Bhagalpur	0·41	37·20	1·06	47·24	0·51	47·09	0·91	61·72	0·48	50·30	0·14	38·46
Purnea	0·24	24·55	1·44	36·84	2·55	41·36	2·16	38·87	1·43	29·05	0·11	28·85
Santal Parganas	0·27	33·04	0·33	30·22	0·57	28·19	0·74	27·03	1·09	24·25	0·22	25·41
Hazaribagh	0·07	34·05	0·59	38·83	0·81	34·12	0·79	31·71	0·27	31·51	0·04	29·51
Ranchi	0·46	49·73	0·41	36·95	0·10	34·07	0·03	30·94	0·05	31·32	0·03	30·93
Palamau	0·31	23·96	0·51	28·68	0·54	33·07	0·72	31·87	0·89	32·72	0·93	47·25
Manbhum	0·02	32·57	0·16	35·58	0·18	35·82	0·41	44·66	0·53	41·52	0·32	26·84
Singhbhum	...	22·71	0·39	37·41	0·59	35·29	0·62	58·38	0·80	38·50	0·13	34·19
Total	0·57	34·67	0·89	37·24	0·52	35·57	0·65	39·23	0·56	35·53	0·21	33·68

STATEMENT NO. V.—Showing the protection afforded to infants in each town in the Province of Bihar during the year 1937-38.

District.	Towns.	Number of births during the year ending 31st March 1937.	Number of deaths amongst infants under one year during the year ending 31st March 1937.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1937.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Patna ...	Patna ...	3,165	526	1,126	1st October 1884.
	Bihar ...	[illegible]	140	414	1st April 1887.
	Dinapur ...	353	191	64	28th January 1891.
	Barh ...	270	54	97	1st April 1887.
	Khagole ...	204	44	60	12th July 1910.
	Total ...	4,680	955	1,761	
Gaya ...	Gaya ...	2,564	786	1,202	1st January 1883.
	Tikari ...	144	15	76	3rd January 1891.
	Daudnagar ...	423	68	256	Ditto.
	Total ...	3,131	869	1,534	
Shahabad ...	Arrah ...	468	48	784	20th July 1885.
	Buxar ...	335	74	154	1st April 1887.
	Dumraon ...	230	7	85	Ditto.
	Jagadispur ...	158	24	23	20th December 1890.
	Sassaram ...	526	64	542	1st April 1887.
	Bhabhua ...	127	14	30	Ditto.
	Total ...	1,844	231	1,618	
	Total of Patna Division.	9,655	2,055	4,913	
Saran ...	Chapra ...	1,418	173	1,245	1st April 1887.
	Revelganj ...	451	30	421	12th December 1890.
	Siwan ...	302	37	265	1st April 1887.
	Total ...	2,171	240	1,931	
Champaran ...	Motihari ...	309	35	105	1st April 1887.
	Bettiah ...	1,085	78	377	Ditto
	Total ...	1,394	113	482	

STATEMENT NO. V.—Showing the protection afforded to infants in each town in the Province of Bihar during the year 1937-38—contd.

District.	Towns.	Number of births during the year ending 31st March 1937.	Number of deaths amongst infants under one year during the year ending 31st March 1937.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1937.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Muzaffarpur ...	Muzaffarpur ...	967	110	229	1st January 1886.
	Sitamarhi ...	281	34	31	1st April 1887.
	Hajipur ...	696	104	92	1st May 1890.
	Lalganj ...	328	31	46	1st April 1887.
	Total ...	2,272	279	398	
Darbhanga ...	Darbhanga ...	1,811	212	236	24th May 1884.
	Roserah ...	224	16	28	3rd January 1891.
	Samastipur ...	278	29	46	25th July 1910.
	Madhubani ...	438	46	37	1st April 1887.
	Total ...	2,751	303	347	
	Total of Tirhut Division.	8,588	935	3,158	
Monghyr ...	Monghyr ...	1,377	167	455	15th November 1882.
	Jamalpur ...	1,049	114	158	Ditto.
	Total ...	2,426	281	613	
Bhagalpur ...	Bhagalpur ...	1,761	210	698	15th February 1884, withdrawn on 16th October 1895; re-extended on 18th August 1898.
	Colgong ...	164	28	34	Ditto, re-extended on 19th December 1901.
	Total ...	1,925	238	732	
Purnea ...	Purnea ...	219	37	123	1st July 1887.
	Kishanganj ...	115	26	118	12th November 1892.
	Katihar ...	142	14	62	8th August 1910.
	Forbesganj ...	111	26	25	9th August 1912.
	Total ...	587	103	328	

STATEMENT NO. V.—Showing the protection afforded to infants in each town in the Province of Bihar during the year 1937-38—concld.

District.	Towns.	Number of births during the year ending 31st March 1937.	Number of deaths amongst infants under one year during the year ending 31st March 1937.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1937.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Santal Parganas ...	Sahibganj ...	137	9	131	1st May 1884.
	Deoghar ...	97	11	111	Ditto.
	Madhupur ...	63	5	113	22nd August 1910.
	Dumka ...	104	6	126	Notifications, dated the 9th April 1884, and 23rd August 1910.
	Total ...	401	31	481	
	Total of Bhagalpur Division.	5,839	653	2,154	
Hazaribagh ...	Hazaribagh ...	367	21	337	1st January 1885.
	Chatra ...	292	26	185	1st August 1885.
	Giridih ...	241	16	181	8th September 1910.
	Total ...	900	63	703	
Ranchi ...	Ranchi ...	840	66	983	1st April 1887.
	Lohardaga ...	221	18	273	25th June 1882.
	Total ...	1,061	84	1,256	
Palamau ...	Daltonganj ...	177	22	180	9th October 1890.
Manbhum ...	Purulia ...	471	40	283	1st January 1887.
	Raghunathpur ...	199	36	51	9th February 1894.
	Jhalda ...	152	14	58	9th July 1892.
	Dhanbad ...	497	30	25	5th December 1918.
	Total ...	1,319	120	417	
Singhbhum ...	Chaibassa ...	242	32	199	20th June 1892.
	Chakradharpur ...	146	17	115	13th January 1919.
	Jugsalai ...	213	11	180	1st April 1924.
	Jamshedpur ...	268	34	1,498	10th January 1933.
	Total ...	869	94	1,992	
	Total of Chota Nagpur Division.	4,326	383	4,548	
	Total for the Province	27,908	4,026	14,773	

ANNEXURE II.

ANNEXURE

Provincial Statement showing the different kinds of lymph [gutter]ed and their rates of success during the year 1937-38.

District.	Primary vaccination.															Re-vaccination.														
	Direct from the calf.					With lanoline or glycerine lymph.					Arm-to-arm vaccination.					Direct from the calf.					With lanoline or glycerine lymph.					Arm-to-arm vaccination.				
	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
tna	...	...	...	...	...	71,209	70,100	583	526	98·44	...	...	...	...	...	...	...	...	...	...	24,584	7,476	5,947	11,161	30·49	...	...	...	...	...
ya ...	...	...	...	...	...	74,651	73,361	886	404	98·27	...	...	...	...	...	...	...	...	...	...	16,389	6,443	2,601	7,345	39·31	...	...	...	...	...
ahabad	...	...	...	...	...	59,523	59,196	108	219	99·45	...	...	...	...	...	...	...	...	...	...	10,891	3,834	5,103	1,954	35·20	...	...	...	...	...
ran	...	...	...	...	...	83,160	80,831	803	1,526	97·20	...	...	...	...	...	...	...	...	...	...	11,118	4,024	4,564	2,430	36·19	...	...	...	...	...
amparan	...	...	...	...	...	69,775	68,657	547	571	98·40	...	...	...	...	...	...	...	...	...	...	23,681	8,517	8,742	6,422	35·96	...	...	...	...	...
uzaffarpur	...	...	...	...	...	107,443	106,956	363	124	99·55	...	...	...	...	...	...	...	...	...	...	27,787	9,987	9,574	8,226	35·94	...	...	...	...	...
rbhanga	...	...	...	...	...	108,372	108,032	294	46	99·68	...	...	...	...	...	...	...	...	...	...	13,250	5,469	4,854	2,927	41·27	.	...	...	...	...
nghyr	...	...	...	...	...	63,391	63,220	112	59	99·73	...	...	...	...	...	...	...	...	...	...	51,015	675	3,150	47,190	1·32	...	...	...	...	...
agalpur	...	...	...	...	...	62,262	60,732	292	1,238	97·54	...	...	...	...	...	...	...	...	...	...	58,152	25,213	12,382	20,557	43·85	...	...	...	...	...
rnea	...	...	...	...	...	62,480	59,900	1,662	918	95·87	...	...	...	...	...	...	...	...	...	...	12,858	3,180	2,196	7,482	24·73	...	...	...	...	...
ntal Parganas	...	...	...	...	...	49,818	48,633	307	878	97·62	...	...	...	...	...	...	...	...	...	...	19,512	3,503	3,184	12,825	52·38	...	...	...	...	...
zaribagh	...	...	...	...	...	41,668	41,262	197	209	99·02	...	...	...	...	...	...	...	...	...	...	10,462	3,521	4,205	2,736	33·65	...	...	...	...	...
nchi	...	...	...	...	...	40,349	40,049	6	294	99·24	...	...	...	...	...	...	...	...	...	...	14,954	8,430	3,783	2,741	56·37	...	...	...	...	...
amau	...	...	...	...	...	24,694	24,180	86	428	97·92	...	...	...	...	...	...	...	...	...	...	29,317	14,505	6,994	7,818	49·48	...	...	...	...	...
nbhum	...	...	...	...	...	47,666	36,529	10,386	751	76·63	...	...	...	...	...	...	...	...	...	...	26,109	12,080	7,995	6,034	46·27	...	...	...	...	...
ghbhum	...	...	...	...	...	24,319	23,233	374	712	95·53	...	...	...	...	...	...	...	...	...	...	28,890	8,558	12,828	7,504	29·62	...	...	...	...	...
Total ...	...	...	...	...	...	990,780	964,871	17,006	8,903	97·38	...	...	...	...	...	...	...	...	...	...	378,969	125,415	98,202	155,352	33·09	...	...	...	...	...

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9 D. P. H.

BGP(DPH) 9—634—2-9-1939—WD & others.

No. 3768-L.S.-G.

GOVERNMENT OF BIHAR.

LOCAL SELF-GOVERNMENT DEPARTMENT.

RESOLUTION.

Dated the 2nd August, 1939.

READ—

The Public Health Report for the year 1937 and the Vaccination Report for the year 1937-38.

1. *Vital statistics.*—The total number of births decreased from 1,144,008 in the previous year to 1,100,657 in the year under review. The total number of deaths rose from 701,814 to 729,454, the increase being due to larger number of deaths from fever and cholera. The excess of birth over the death rate was 11·5 as compared with 13·6 in the previous year. Registration of vital occurrences is compulsory only in the municipal areas. A certain percentage of vital occurrences was investigated and verified by the officers of the Public Health Department. An attempt has been made in the recent years to transfer the responsibility for collection, tabulation and verification of vital occurrences to the bigger municipalities and experience shows that the municipal statistics are more reliable than those collected by the police. With the increasing number of health officers employed by municipalities more of them will be in a position to undertake this work.

2. *Infant mortality.*—Government view with satisfaction the decrease in the rate of infant mortality from 118·0 per thousand in the previous year to 115·9 per thousand during the year under review. Though maternity and child welfare work is gradually expanding much still remains to be done in this direction specially in rural areas. Some of the municipalities maintain midwifery services and it is commendable that some of the district boards have introduced schemes for training indigenous *dais*.

3. *Cholera.*—The total number of deaths rose from 6,070 in the last year to 13,949 during the year under report and the corresponding death rate from 0·2 to 0·4. The districts of Bhagalpur and Monghyr and the towns of Hajipur, Colgong, Revilganj recorded highest number of deaths from this disease. Of the other districts Muzaffarpur, Gaya, Santal Parganas and Patna reported comparatively larger number of deaths from cholera during the year. Government deputed doctors on epidemic duty to cholera-infected areas whenever the staff of the local bodies were found to be inadequate to cope with the situation and disinfectants and cholera vaccines were distributed in such areas by the Public Health Department. The number of doses of cholera vaccine issued by the department during the year was 610,000 against 288,930 during the previous year. Anti-cholera inoculation is gaining greater appreciation and hardly any objection is now raised to its use.

4. *Bacteriophage.*—124,090 phials of choleraphage of 50 c.c. were prepared during the year in the Bacteriophage Laboratory at Patna and 121,921 phials were distributed to various towns and districts of the province. Choleraphage was also prepared in ampouls of which 500 were issued during the year. Besides the production of choleraphage the basic research on bacteriophage was also continued.

5. *Small-pox.*—The total number of deaths from small-pox decreased from 22,863 in the previous year to 7,485 during the year under report and the corresponding death rate from 0·7 to 0·2. The lower death rate is

attributed to the immunity conferred by extensive vaccination and revaccination. As usual the rural areas suffered more than the urban and the highest death rate was registered in the districts of Palamau, Manbhum and Gaya. The districts of Ranchi, Muzaffarpur and Hazaribagh recorded the lowest death rate. Among the towns Bettiah, Patna City and Chatra reported the highest death rate. Primary vaccination is compulsory in all the municipal towns and also in rural areas of nine districts. The control of vaccination has been transferred to those local bodies which have initiated approved health organisation schemes and the health officers of these districts have been appointed to be superintendents of vaccination. In these districts the inspecton of vaccination is now carried out by the district health staff and the Government vaccination inspecting staff have been withdrawn. It is hoped that in the near future all the district boards of the province will take over the direct control of this very important public health measure. Until they do so, there is no hope of making vaccination universally acceptable and providing facilities for the vaccination and revaccination of the entire population; and Government must endorse the view of the Director of Public Health that so long as primary vaccination and periodical revaccination of the entire population are not made compulsory it will not be possible to completely eradicate the disease.

6. *Plague.*—The total number of deaths from plague slightly increased from 1,245 in the previous year to 1,470 during the year under report. The death rate was the same as in the previous year, viz., 0·08. The district of Saran recorded the highest death rate followed by Muzaffarpur and Champaran. The town of Bettiah also remained infected with plague almost throughout the year except in the months of August and October. Bettiah being an important grain centre of the district offers a favourable field for a high rat population. Necessary preventive measures were taken by the Public Health Department: epidemic doctors were detailed on plague duty and extensive anti-plague inoculations were given to the people in the affected districts.

7. *Dropsy.*—Government note with satisfaction that Beri Beri or epidemic dropsy did not occur in epidemic form in any of the districts in the province during the year under report. Sporadic cases were, however, reported from all the districts and 828 cases in all were treated in the hospitals and dispensaries in the province. The highest number of cases was reported from the districts of Manbhum, Patna, Bhagalpur and Monghyr.

8. *Malaria.*—The high incidence of malaria during the year is reflected in the increased number of deaths from fevers which were 584,873 as against 549,009 in the previous year. As in the previous year, North Bihar suffered most. The districts of Purnea, Palamau, Bhagalpur, Darbhanga, Muzaffarpur and Hazaribagh recorded the highest death rate. All possible measures were taken by Government for combating the disease. Twenty-one epidemic doctors of the Public Health Department were detailed for malaria duty whilst 1,981 lbs. of quinine and 50 lbs. cinchona febrifuge was provided by the department for free distribution in affected areas. A large number of anti-malaria centres and sub-centres were also set up throughout the affected areas.

9. *School Medical Inspection.*—Out of 11,430 boys and 947 girls examined as many as 4,958 boys and 655 girls were found to be defective or diseased. Besides minor troubles, e.g., enlarged tonsils, bad teeth, errors of refraction, etc., 38·4 per cent of the students were found to suffer from malnutrition. Pulmonary tuberculosis and leprosy were also noticed in some of them. Any appreciable improvement in the health of the students requires sincere co-operation of parents and guardians who are kept informed of the particular defects in their wards and Government trust that by special propaganda work by School Medical Officers and by arranging lectures and demonstrations in selected centres, co-operation of parents and guardians will be forthcoming in a greater measure in future. The scheme for providing mid-day school lunch on a monthly fee of annas eight per student introduced in the Purulia Zila School in 1934 has now been taken up by quite a number of high schools in

the province. Government are glad to note that the system is reported to be working very satisfactorily.

10. *Public Health Department (Engineering Branch).*—A summary of the activities of this department relating to sanitary works in areas under the jurisdiction of the local bodies during the year is appended to the report.

11. The office of the Director of Public Health was held by Lt.-Col. J. A. S. Phillips, C.I.E., I.M.S. from the 1st January to the 14th February 1937 and by Lt.-Col. S. L. Mitra, I.M.S. from the 15th February to the end of the year. Government desire to thank both these officers for the efficient manner in which the administration of the department was carried on and for the cordial relations which the department maintained with the local bodies during the year. Government have noted the names of the subordinate officers commended in the report.

By order of the Governor of Bihar,

B. C. MUKHARJI,

Secretary to Government.